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ABSTRACT

This annotated bibliography is designed to assist applicants for research grants under part C (section 131a) of the amendments to the Vocational Education Act of 1963 by providing access to documents, journal articles, and current projects related to the individualization and modularization of vocational education instructional materials. The report literature and journal articles cited were found in a computer-assisted search of "Resources in Education" (RIE), "Abstracts of Instructional and Research Materials in Vocational Education" (AIM/ARM), and "Current Index to Journals in Education" (CIJE), and were selected from among a larger number uncovered in the initial search as the most relevant to the topical area and representative of previous work. Citations include 33 ERIC documents, 15 AIM/ARM documents, 62 journal articles, and 18 current projects. Also included are instructions for ordering the cited materials. (NJ)

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INDIVIDUALIZATION AND MODULARIZATION OF VOCATIONAL EDUCATION INSTRUCTIONAL MATERIALS

An Annotated Bibliography of Publications and Projects

compiled by
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The Center for Vocational Education
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October 1975

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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VT 103 598

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OE 009 6-60

FOREWORD

The project staff of *Abstracts of Instructional and Research Materials in Vocational and Technical Education* (AIM/ARM) prepared this bibliography to help applicants for support of research under the Vocational Education Act of 1963, as amended (Section 131a of Part C). The bibliography provides access to documents, journal articles, and current projects related to individualization and modularization of vocational education instructional materials, one of four research priorities established by the U.S. Office of Education for fiscal year 1976. Other bibliographies corresponding to FY76 Part C research priorities include:

Adult Vocational Education (Bibliography Series No. 30)

Post-Secondary Vocational Education (Bibliography Series No. 31)

Special Needs Populations (Bibliography Series No. 33)

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INTRODUCTION

Individualization and modularization of vocational education instructional materials has been designated as a priority area for research projects to be sponsored by the U.S. Office of Education during fiscal year 1976. When undertaking a research project it is important to take into consideration previous work and current activity in the same area so as to avoid duplication and build upon prior knowledge. Reports on completed work have been announced in *Resources in Education* (RIE) or *Abstracts of Instructional and Research Materials in Vocational and Technical Education* (AIM/ARM) or described in journal articles announced in *Current Index to Journals in Education* (CIJE).

The report literature and journal articles cited in this publication were found in a computer-assisted search of RIE, AIM/ARM, and CIJE. These citations were selected from among a larger number uncovered in the initial search. The selected items were deemed relevant to the topical area and representative of previous work. As with most bibliographies, the inclusions are a product of the search strategies and the judgement of the compilers. Therefore, users of the bibliography should seek information from other sources as well.

The documents listed are available in microfiche or paper copy from the ERIC Document Reproduction Service (EDRS) or the original source as indicated in the citation. The journals may be found in most state and university libraries. The current projects cited were selected from among those listed in AIM/ARM (Volume 7, Nos. 4-6; Volume 8, Nos. 1-3). Additional information about these projects may be obtained from the project directors listed.

ERIC DOCUMENTS

ED105914 JC750307

AN EVALUATION OF INDIVIDUALIZED INSTRUCTION FOR EVENING/PART-TIME STUDENTS OF BUSINESS ADMINISTRATION.

Sutherland, Alphonzo A.

Pub Date-May 75 Note-58p.; Practicum presented to Nova University in partial fulfillment of the requirements for the Doctor of Education degree

EDRS Price MF-$0.76 HC-$3.32 PLUS POSTAGE

Descriptors-Academic Achievement/Business Administration/Business Education/Conventional Instruction/Curriculum Development/Educational Disadvantaged/*Evening Students/*Individualized Instruction/*Junior Colleges/Mexican Americans/*Part-Time Students/Practicums/*Teaching Methods

Identifiers-El Paso Community College

This study is part of a program initiated by the Business Administration Division of El Paso Community College (Texas), in 1973 to evolve a curriculum with supporting instructional techniques which will meet the special needs of evening and part-time students in a student body which is nearly 60 percent Mexican-American. Evening students from this group have learning handicaps which are in part the result of poor secondary education. The evaluation reported here of individualized instructional packets for the Introduction to Business course utilized three section of evening students, with the same instructor and identical behavioral objectives for all the sections. One section utilized the individualized instructional packets; a second section used the lecture/discussion method; while the third used the lecture/discussion method with students given the option of using the individualized materials as a supplement. The results of the evaluation, using end-of-course achievement scores as the unit of measurement, found the optimal section to be significantly better than the individualized instruction section. However, the small number of students (20 percent) utilizing the optional materials makes this finding inconclusive. It is clear, however, that only marginal results will be obtained from individualized courses unless they are supported with media and personalized counseling. Sample individualized packets are appended. (Author/AH)

ED105206 CE003592

MODULE DIRECTORY FOR AGRICULTURAL EDUCATION

New York State Education Dept., Albany. Bureau of Secondary Curriculum Development.

Pub Date-74 Note-130p.; For the Modular Design Approach, see CE 003 305

EDRS Price MF-$0.76 HC-$6.97 PLUS POSTAGE

Descriptors-*Agricultural Education/Course Content/*Course Descriptions/*Guides/*Schedule Modules/Time

A modular design approach for agricultural education has been developed. As part of its development, over 200 modules were produced and tested, and are described in this volume. The modules are categorized as modules of instruction in agricultural production, in agricultural supplies and services, in agricultural mechanics, in ornamental horticulture, in agricultural resources, in forestry, and in leadership development. Each module has a title, code number, brief description of content, and an outline of divisions or units of content with time allocation specified for each unit. The description of content is a narrative statement of the kinds of learnings and activities to be expected in each module. The suggested time allocation is provided to make sure the learning is activity centered. The volume is meant to be used in conjunction with MODULAR DESIGN APPROACH FOR AGRICULTURAL EDUCATION. Complete modules of instruction containing objectives, content, suggested teaching methods, student application activities, suggested evaluation procedures, and a list of resource materials is available from the Bureau of Agricultural Education, Room 1623, Twin Towers, 99 Washington Avenue, Albany, New York 12230. (AG)

ED105175 CE003455

NOTES ON CURRICULUM DEVELOPMENT AND SAMPLE CAREER EDUCATION MODULES.

Olson, LeVene A.

Marshall Univ., Huntington, W. Va. Dept. of Occupational and Adult Education.

Pub Date-Aug 74 Note-74p.; Not available in hard copy due to marginal legibility of original document

EDRS Price MF-$0.76 HC Not Available from EDRS. PLUS POSTAGE

Descriptors-Career Awareness/*Career Education/*Curriculum Development/ Decision Making/Educational Objectives/*Elementary Secondary Education/ Health Education/*Integrated Curriculum/Language Arts/Learning Activities/ Occupational Clusters/Occupational Information/*Resource Units/Science Education/Self Concept/Self Evaluation/Social Studies/Units of Study (Subject Fields)

The publication is intended to provide some guidance to educators who are in the process of developing career education units which will be integrated into and correlated with school subjects. The first part of the document focuses on developing resource units, and offers information on goals and objectives, on the integration of career education into the existing curriculum, on occupational clusters, and on the unit format. Steps to be followed in developing career education modules are outlined. Among the key concepts of career education which are exemplified in the notes are these: career education focuses on learning experiences related to self-understanding, educational endeavors, and career potential; concrete experiences are utilized to illustrate abstract concepts; and, career education provides experiences related to a sample of occupations at all levels. Decision-making experiences are provided, but students are not forced to make early career decisions. The second part of the document is comprised of exemplary career education modules incorporating those concepts, for use at primary, intermediate, junior high school, and high school levels. These sample units were developed by 203 educators participating in career education curriculum development classes sponsored by a Regional Education Service Agency (RESA) in an eight-county area in West Virginia. (Author/AJ)

ED105080 CE003305

MODULAR DESIGN APPROACH FOR AGRICULTURAL EDUCATION.

New York State Education Dept., Albany. Bureau of Secondary Curriculum Development.

Pub Date-74 Note-64p.; For the Module Director, see CE 003 992

EDRS Price MF-$0.76 HC-$3.32 PLUS POSTAGE

Descriptors-*Agricultural Education/Classification/Curriculum Design/Curriculum Development/Educational Programs/Evaluation Methods/Program Administration/*Program Design/*Program Development/Program Evaluation/*Schedule Modules/Secondary Education/Student Centered Curriculum

The modular curriculum for agricultural education was developed and refined by teachers and consultants to meet student needs for a more flexible type of curriculum in which the student's occupational goals would form the basis for program planning. The module--a unit of curriculum based on the development of entry level competencies--contains the following characteristics: 30 hours of instruction, student oriented, immediate goal attainment, free standing, body of related content, and continuous revision. The modular design program, for 16-18 year olds, is characterized by its greater subject matter choice, open door policy, seasonality, free flow of student movement, secondary or continuing education levels, individualization, and enrichment. A step-by-step procedure is offered to help establish such a program, including a list of personnel responsibilities and duties. Conducting the program involves preparation, module introduction, work experience programs, and youth leadership development activities. Different methods for program evaluation are proposed; forms for both a student and a teacher evaluation are included. The classification system for modules is a 16-page concluding section providing an explanation of the classification system, a description of the types of modules, and an index of over 200 modules prepared to date. (AG)

ED105077 CE003177

INDIVIDUALIZED INSTRUCTION IN BUSINESS AND OFFICE EDUCATION

Pasewark, William R.; Kilchenstein, Dolores

Pub Date-71 Note-76p.

Available from-Publication Sales, American Vocational Association, Inc., 1510 H Street, NW, Washington, D.C. 20005 ($2.00, quantity discounts available, payment must accompany order)

Document Not Available from EDRS.

Descriptors-*Business Education/Educational Programs/Flexible Scheduling/*Individualized Instruction/Instructional Materials/Office Machines/*Office Practice/*Program Descriptions/Program Evaluation/Student Evaluation/Teacher Role/Units of Study (Subject Fields)

Twenty-five individualized instruction programs in business and office education are described to illustrate the variety of forms individualized instruction may take. The programs are grouped in three categories: (1) scheduled (10 programs)--a regularly scheduled class of the same students meeting together, regularly, at the same assigned time; (2) unscheduled (3 programs)--the students attend a learning laboratory at times they find convenient; (3) both (12 programs)--the students attend a regularly scheduled

class but may also use a lab facility, at either assigned or unassigned hours. Most of the program descriptions include an itemization of the areas of knowledge covered in the program in which individualized instruction strategy was used, an explanation of how the individualized instruction was incorporated, and the teacher's evaluation of the effectiveness of the strategy. Where appropriate, additional information was provided regarding the basis for the learning activities prescribed for the student, the nature of the hardware and software utilized, the availability of the learning facility to the students, student routine while using the facility, supervisor's role, and progress checks on the student. The teachers generally support the concept of individualized instruction, but some express the need for caution in its implementation. (AG)

ED104512 JC750301

A COMPARISON OF USING INDIVIDUALIZED INSTRUCTION AND CONVENTIONAL LECTURE TECHNIQUES IN THE LECTURE SECTION OF ELECTRIC CIRCUITS 540-126.

Taber, Margaret R.

Pub Date-Jun 74 Note-33p.; Practicum presented to Nova University in partial fulfillment of the requirements for the Doctor of Education degree. For a related document, see JC 750 300; Best copy available

EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE

Descriptors-Autoinstructional Methods/Conventional Instruction/*Engineering Education/Engineering Technology/*Individualized Instruction/*Junior Colleges/Programed Instruction/*Teaching Methods/*Technical Education

Identifiers-Cuyahoga Community College/Keller (Fred)/*Personalized System of Instruction/PSI

Electric Circuits 540-126 is the second course of a three-course sequence which is taken during the first year of the two-year program in Eletrical-Electronic Engineering Technology at Cuyahoga Community College (Ohio). The conventional lecture method of instruction includes textbook and other reading assignments, lectures based on the readings and homework problems, one to three tests, and a final exam. The individualized instruction method utilizes a modified Personalized System of Instruction (PSI) format including ten modules, audio tapes, a study guide, one 50-minute lecture per module, a test given by tutors every week, two bonus tests given by the instructor, and a final exam. This study was conducted to determine if this individualized instruction method decreases student attrition rates and provides the student with comparable preparation for Electric Circuits 540-127 as the 540-126 course taught by the conventional method. A higher percentage of students enrolled in the individualized instruction sections passed the course, compared to students enrolled in the conventionally taught sections; they also received a significantly higher percentage of B's and a significantly lower percentage of C's. They performed as well in 540-127, and 88.1 percent of those enrolled in the individualized instruction sections of 540-126 said they would choose the same method for 540-127. (DC)

ED104511 JC750300

A COMPARISON OF USING INDIVIDUALIZED INSTRUCTION AND CONVENTIONAL LECTURE TECHNIQUES IN THE LECTURE SECTION OF ELECTRIC CIRCUITS 540-125.

Taber, Margaret R.

Pub Date-Apr 74 Note-46p.; Practicum presented to Nova University in partial fulfillment of the requirements for the Doctor of Education degree. For a related document, see JC 750 301; Best copy available

EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE

Descriptors-Autoinstructional Methods/Conventional Instruction/*Engineering Education/Engineering Technology/*Individualized Instruction/*Junior Colleges/Programed Instruction/Student Opinion/*Teaching Methods/*Technical Education

Identifiers-Cuyahoga Community College/Keller (Fred)/*Personalized System of Instruction/PSI

Electric Circuits 540-125 is the first course of a three-course sequence taken in the first year of the two-year program in Electrical-Electronic Engineering Technology at Cuyahoga Community College (Ohio). The conventional lecture method of instruction includes textbook and other reading assignments, lectures based on the readings and homework problems, two or three tests, and a final exam. The individualized instruction method utilizes a modified Personalized System of Instruction (PSI) format including eight modules, audio tapes, a study guide, one 50-minute lecture per module, a test about every two weeks, and a final exam. This study was conducted to determine if this individualized instruction method decreases student attrition rates and provides the student with comparable preparation for Electric Circuits 540-126 as the 540-125 course taught conventionally. Compare to students enrolled in conventional sections, a higher percentage of students enrolled in the individualized instruction sections passed the course; they also had significantly higher grades on the final exam and performed as well in 540-126. Letter grade distribution in 540-125 was independent of the teaching method used and 90.2 percent of those enrolled in the individualized instruction sections of 540-125 said they would choose the method for 540-126. (DC)

ED103671 CE003278

INDIVIDUALIZED RELATED INSTRUCTION FOR ENTERING THE WORLD OF WORK.

Kimbrell, Grady; Vineyard, Ben S.

Pub Date-74 Note-128p.

Available from-McKnight Publishing Co., Box 854, Bloomington, Illinois 61752 ($2.64)

Document Not Available from EDRS.

Descriptors-Aptitude Tests/*Career Education/*Career Planning/Cooperative Education/*Individualized Instruction/*Instructional Materials/Interpersonal Competence/Job Application/*Learning Activities/Secondary Education/Self Actualization/Self Evaluation/Textbooks/Work Attitudes

Identifiers-Career Exploration/*World of Work

The field-tested activity manual is intended to improve cooperative education coordinators' relationships with their students by providing an individualized approach that allows the student to participate in planning the area of emphasis for study and activity. Although useful in regularly scheduled classes, it was prepared especially for those students who are a part of work experience programs in which it is impossible to meet regularly as a group. The manual is divided into six units which provide activities

and quizzes related to the world of work. Unit 1 discusses the facets of life that provide the means to personal fulfillment and includes activities for analyzing goals. In Unit 2, part-time jobs as a career exploration tool are examined. Unit 3 provides application forms and activities related to applying for a job. Employer-employee and co-worker relationships are considered in Unit 4, emphasizing the importance of attitudes. Unit 5 deals with job performance and evaluation, while Unit 6 provides self-inventory activities enabling the student to complete a personal career profile analysis. Included are: an attitudinal inventory, values appraisal scale, hobby interests evaluation, people-data-things evaluation, and aptitude tests in vocabulary, mathematics, and clerical skills. (Author/MW)

ED102356 CE003061

METAL TRADES MODULES. VOCATIONAL BEHAVIORAL OBJECTIVES: A GUIDE FOR INDIVIDUALIZING INSTRUCTION.

Westinghouse Learning Corp., New York, N.Y.

Pub Date-73 Note-47p.; For related guides, see CE 003 358-60

Available from-Westinghouse Learning Corporation, 100 Park Avenue, New York, New York 10017 ($29.50 for the set of four related guides)

Document Not Available from EDRS.

Descriptors-*Behavioral Objectives/Career Education/*Curriculum Guides/Equipment Maintenance/*Individualized Instruction/Industrial Training/Job Training/Metal Working Occupations/Occupational Information/Performance Based Education/Post-Secondary Education/Safety Education/Secondary Education/*Sheet Metal Work/Skill Development/*Trade and Industrial Education/Vocational Education/Welders/Welding

The curriculum guide focuses on the metal trades area at the secondary level of vocational education and industrial arts. It addresses the subject in behavioral terms, as prominent components of the career education concept. Presenting two skill modules, sheet metal working and welding, the objectives presented are designed to be compatible with individualized systems and/or application to small and large group use. Terminal and transitional objectives are presented, the transitional objectives are designed to break the major task into subtasks at four specific competency levels: (1) entry level, only cursory knowledge of the task; (2) successful performance with direct supervision; (3) successful performance with routine supervision; and (4) independent performance at the journeyman level. Concepts treated in the sheet metal worker and welder modules include: safety practices; equipment maintenance; related mathematical concepts; the use of instruments; and materials selection. Specific sheet metal concepts include: design and layout; forming, cutting and bending metal; fastening methods; component construction and mounting; and repair techniques. Welding concepts include: gas and oxyacetylene welding; various position welds; fusion welding; brazing; cutting; hard facing techniques; arc welding and TIG welding. Test items for each competency level are provided, evaluative criteria suggested, and occupational information presented. A seven-page bibliography is appended. (MW)

ED102355 CE003060

BUILDING TRADES MODULES. VOCATIONAL BEHAVIORAL OBJECTIVES: A GUIDE FOR INDIVIDUALIZING INSTRUCTION.

Westinghouse Learning Corp , New York, N.Y.

Pub Date-73 Note-93p.; For related guides, see CE 003 058-061

Available from-Westinghouse Learning Corporation, 100 Park Avenue, New York, New York 10017 ($29.50 for the set of four related guides)

Document Not Available from EDRS.

Descriptors-Behavioral Objectives/Bricklaying/*Building Trades/Career Education/Carpenters/Construction (Process)/*Curriculum Guides/Electricians/Housing Industry/*Individualized Instruction/Job Training/Occupational Information/Painting/Performance Based Education/Plumbing/Post-Secondary Education/Safety Education/Secondary Education/*Trade and Industrial Education/Vocational Education

The curriculum guide focuses on the building trades at the secondary level of education and industrial arts. It addresses the subject in behavioral terms, as prominent components of the career education concept. Presenting five skill modules, painting, carpentry, brick/stonemasonry, electrical, and plumbing/pipefitting, the objectives presented are designed to be compatible with individualized systems and/or application to small and large group use. Terminal and transitional objectives are presented, the transitional objectives are designed to break the major task into subtasks at four specific competency levels: (1) entry level, only cursory knowledge of the task, (2) successful performance with direct supervision, (3) successful performance with routine supervision, and (4) independent performance at the journeyman level. Concepts treated in the five modules include safety practices and the maintenance and operation of tools and equipment. Specific skills related to each trade are provided, emphasizing applications to residential construction and local building codes. Test items for each competency level are provided, evaluative criteria suggested, and occupational information offered. A seven-page bibliography is appended. (MW)

ED102354 CE003059

AUTOMOTIVE MODULES. VOCATIONAL BEHAVIORAL OBJECTIVES: A GUIDE FOR INDIVIDUALIZING INSTRUCTION.

Westinghouse Learning Corp., New York, N.Y.

Pub Date-73 Note-80p.; For related guides, see CE 003 058-061

Available from-Westinghouse Learning Corporation, 100 Park Avenue, New York, New York 10017 ($29.50 for the set of four related guides)

Document Not Available from EDRS.

Descriptors-Auto Body Repairmen/*Auto Mechanics/Auto Mechanics (Occupation)/*Behavioral Objectives/Career Education/*Curriculum Guides/Diesel Engines/Engines/Equipment Maintenance/*Individualized Instruction/Job Training/Occupational Information/Performance Based Education/Post-Secondary Education/Safety Education/Secondary Education/Skill Development/*Trade and Industrial Education/Vocational Education

The curriculum guide deals with automotive repair skills at the secondary level of vocational education and industrial arts. It addresses the subject in behavioral terms, as prominent components of the career education concept.

Presenting four skill modules, auto body repair, gas engine repair, service, and diesel engine mechanics, the objectives presented are designed to be compatible with individualized systems and/or application to small and large group use. Terminal and transitional objectives are presented at four specific competency levels: (1) entry level abilities, (2) supervised performance, (3) successful performance with routine supervision, and (4) independent performance at the journeyman level. Concepts treated include safety practices, the maintenance and operation of tools and equipment; auto body repair skills include welding procedures, spray painting, straightening, and frame aligning. Gas engine repair skills include theory of engine components and service techniques. Automotive service skills focus on the tune up, transmission, front end, and brakes. The diesel engine mechanic module deals with basic principles, tear-down and assembly procedures, and testing techniques. Test items evaluative criteria, and occupational information are included A seven-page bibliography is appended. (MW)

ED102353 CE003058

PREVOCATIONAL BASIC SKILLS MODULE. VOCATIONAL BEHAVIOR OBJECTIVES: A GUIDE FOR INDIVIDUALIZING INSTRUCTION.

Westinghouse Learning Corp., New York, N.Y.

Pub Date-73 Note-30p.; For related guides, see CE 003 059-61

Available from-Westinghouse Learning Corporation, 100 Park Avenue, New York, New York 10017 ($29.50 for the set of four related guides)

Document Not Available from EDRS.

Descriptors-*Behavioral Objectives/Career Awareness/Career Education/*Curriculum Guides/*Individualized Instruction/*Industrial Arts/Industrial Training/Performance Based Education/*Prevocational Education/Secondary Education/Skill Development/Task Performance/Trade and Industrial Education/Training Objectives/Vocational Development

The curriculum guide deals with prevocational basic skills at the secondary level of vocational education and industrial arts. It addresses the subject in behavioral terms, as prominent components of the career education concept. The objectives presented are designed to be compatible with individualized systems and/or application to small and large group use. Terminal and transitional objectives are presented, the transitional objectives are designed to break the major task into subtasks at four specific competency levels: (1) entry level, only cursory knowledge of the task; (2) successful performance with direct supervision; (3) successful performance with routine supervision; and (4) independent performance at the journeman level. Concepts treated in the prevocational basic skills module include: (1) prevocational exploration objectives to provide a group of terminal topics for consideration by students not previously enrolled in career awareness programs; and (2) basic skills designed to support the established vocational objectives in automotive, building trades, and mental trades. Test items for each competency level are provided and evaluative criteria suggested. A seven-page bibliography is appended. (MW)

ED101770 JC750123

A NON-TRADITIONAL METHOD FOR TEACHING MATHEMATICS TO OCCUPATIONAL/TECHNICAL STUDENTS.

Ellis, Harry; Payez, Joseph F.

Pub Date-Nov 74 Note-7p.; Paper presented at the Fall Maryland, D.C., Virginia Sectional Meeting of the Mathematical Association of America (Rockville, Maryland, November 1974)

EDRS Price MF-$0.76 HC-$1.58 PLUS POSTAGE

Descriptors-Audiovisual Instruction/College Mathematics/*Individualized Instruction/Instructional Innovation/*Junior Colleges/Learning Motivation/*Mathematics Instruction/Programed Instruction/Relevance (Education)/*Technical Education/Technical Mathematics/*Trade and Industrial Education/Vocational Education

Identifiers-*Paul D. Camp Community College/Virginia

An alternative to the traditional lecture method for teaching mathematics to occupationa/technical students has been developed at Paul D. Camp Community College in Virginia. Fundamental to the new system is the need for the student to see the relevance of his studies to his occupational goals, as seemingly irrelevant material presents a motivational problem. An effort was made to structure mathematics courses to fit specific student needs within each occupational program. Mathematical skills were broken into groups, and the skills essential to each program were determined. Common blocks of mathematics instruction in fractions, decimals, etc., were supplemented by problems tailored to and written in the individual occupational jargon. Students studied the blocks at their own pace, and tests were administered at the end of each block. Some students complete their math requirement in one quarter; others may take four or five quarters. A mathematics laboratory with a math instructor and an audiotutorial system for the basic arithmetic program are included in the program. Although there is no statistical data with which to evaluate the program at this time, preliminary reports with respect to learning and dropout rates are favorable. (AH)

ED097882 IR001244

MATERIALS CATALOG; AN ANNOTATED LISTING OF STAFF TRAINING MATERIALS FOR THE INDIVIDUALIZED MANPOWER TRAINING SYSTEM.

Technical Education Research Center, Montgomery, Ala.

Spons Agency-Manpower Administration (DOL), Washington, D.C. Office of Research and Development.

Pub Date-Aug 74 Note-35p.; For related documents see IR 001 243 and ED 072 316

EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE

Descriptors-*Catalogs/*Individualized Instruction/Individualized Programs/*Instructional Materials/*Manpower Development/*Vocational Education

Identifiers-*Individualized Manpower Training System

An annotated listing of staff training materials for the Individualized Manpower Training System is given in this catalog. Included for each listing are descriptions, sources, uses, and prices for the material. (WH)

ED097881 IR001243

A MODEL PROGRAM TO INSTRUCT MANPOWER TRAINING PERSONNEL IN THE SELECTION AND APPLICATION OF REMEDIAL INSTRUCTIONAL MATERIALS TO MEET INDIVIDUAL TRAINEE NEEDS. - FINAL REPORT.

Technical Education Research Center, Montgomery, Ala.

Spons Agency-Manpower Administration (DOL), Washington, D.C. Office of Research and Development.

Pub Date-June 74 Note-103p.; For related document see IR 001 244 and ED 072 316; Document may reproduce poorly in hard copy due to color of original

EDRS Price MF-$0.76 HC-$5.70 PLUS POSTAGE

Descriptors-Field Studies/*Individualized Instruction/*Manpower Development/Occupational Choice/*Occupational Guidance/Occupational Information/Program Evaluation/Remedial Instruction/Teacher Education/Vocational Counseling/*Vocational Directors/*Vocational Education/Vocational Education Teachers/Vocational Follow-up/Vocational Retraining/Vocational Training Centers

Identifiers-IMTS/*Individualized Manpower Training System

A project to develop a model program to instruct training personnel for an Individualized Manpower Training System (IMTS) is reported. In two phases, January 1971 to June 1972 and July 1972 to December 1973, the project trained personnel and field tested IMTS at 10 scattered sites in California and the South. The IMTS component programs include remedial academic training, complementary skills, occupational exploration, and employability and prevocational training. Also included within the second phase was an analytical assessment of IMTS impact on trainees and institutions at the 10 pilot-demonstration sites. Though the results are conditioned by weaknesses in recording and reporting data, they do reflect the effectiveness of the training afforded through the IMTS. The staff training materials have been revised as a result of the field tests at the various pilot-demonstration sites. (Author/WH)

ED097874 IR001235

PRECISION MEASURING EQUIPMENT (PME) INDIVIDUALIZED INSTRUCTION. FINAL REPORT.

Lewis, William E., et al.

Air Force Human Resources Lab., Brooks AFB, Texas.

Report No.-AFHRL-TR-74-46

Pub Date-Aug 74 Note-64p.; Period covering 1 July 1971 through 31 October 1973

EDRS Price MF-$0.76 HC-$3.32 PLUS POSTAGE

Descriptors-*Audiovisual Instruction/*Autoinstructional Methods/Cognitive Processes/Cost Effectiveness/Individualized Curriculum/*Individualized Instruction/Individualized Programs/Instructional Improvement/Instructional Innovation/*Military Training/Programed Instruction/Student Attitudes/*Technical Education

Identifiers-Advanced Instructional System/*Air Force/Precision Measuring Equipment Specialist/Waveform Analysis

Self-paced programed and audiovisual (AV) instructional materials covering portions of the Air Force course, Precision Measuring Equipment (PME) Specialist, were developed, administered, and evaluated as means of assessing the feasibility of individualizing the PME training as part of the Air Force's Advanced Instructional System (AIS). The materials for a 90-hour block of instruction, entitled Waveform Analysis, included printed and AV material and covered complex cognitive and performance skills. The mean written test

score for the block was 80 percent (passing was 70 percent), but this was achieved with an average 31 percent reduction in training time. Trainees indicated a positive attitude toward the course. Similar results were obtained in trials with smaller blocks of time. The reduction in training time coupled with trainee achievement supports the feasibility of individualizing the PME course. The projected cost savings in excess of $40,000 a year argue strongly for the cost effectiveness of individualizing the entire PME course and other similar technical training courses. (Author/WH)

ED097559 CE002332

INDIVIDUALIZED STUDY GUIDE ON APICULTURE: STUDENT GUIDE. CURRICULUM MATERIALS FOR AGRICULTURAL EDUCATION.

Housman, John L.; et al.

Virginia Polytechnic Inst. and State Univ., Blacksburg. Div. of Vocational-Technical Education; Virginia State Dept. of Education, Richmond. Div. of Vocational Education.

Report No.-AP-15

Pub Date-Feb 74 Note-181p.; For Instructor's Guide see CE 002 331

EDRS Price MF-$0.76 HC-$9.51 PLUS POSTAGE

Descriptors-*Agricultural Education/*Agricultural Occupations/Agricultural Production/Behavioral Objectives/Course Content/Course Descriptions/*Curriculum Guides/*Entomology/Environmental Education/*Individualized Programs/Instructional Materials/Lesson Plans/Off Farm Agricultural Occupations/Post-Secondary Education/Secondary Grades/Vocational Education

Identifiers-Apiculture/*Beekeeping

The study guide contains introductory level information, principles and management practices which may be applied by a hobbyist or a commercial apiary. The lessons are designed to train students for entry level jobs, to establish students in a beekeeping enterprise, and to emphasize the importance of honey bees in our daily lives and in agricultural production. Topics to be considered include: the honeybee and her products, colony organization, housing and equipment, bee selection, apiary location, hive management, diseases, honey production, and laws and regulations. Each lesson plan includes activity, information, and project sheets, glossary and references, quizzes, and answer sheets. The study guide is intended to supplement community resources, on-the-job training, and provide the student with performance objectives during classroom instruction. (Author/MW)

ED097558 CE002331

INDIVIDUALIZED STUDY GUIDE ON APICULTURE: INSTRUCTOR'S GUIDE. CURRICULUM MATERIALS FOR AGRICULTURAL EDUCATION.

Housman, John L.; et al.

Virginia Polytechnic Inst. and State Univ., Blacksburg. Div. of Vocational-Technical Education; Virginia State Dept. of Education, Richmond. Div. of Vocational Education.

Report No.-AP-16

Pub Date-Feb 74 Note-21p.; For Student Guide see CE 002 332

EDRS Price MF-$0.76 HC-$1.58 PLUS POSTAGE

Descriptors-*Agricultural Education/*Agricultural Occupations/Agricultural Production/Curriculum Guides/*Entomology/Environmental Education/*Individualized Programs/*Instructional Materials/Off Farm Agricultural Occupations/Resource Materials/Secondary Grades/Teaching Guides/Teaching Methods

Identifiers-Apiculture/*Beekeeping

The instructor's guide is coordinated for use with the student guide. The guide includes suggestions for teacher preparation, equipment and supply needs, suggested references, available audiovisual materials, open-ended questions for classroom discussion, educational opportunities for students, and a form for student evaluation of the study guide. The teacher may use the study guide as a basis for group study, practical application, or individualized instruction. The teacher is responsible for directing the study and learning program of the student; however, the teacher's role should be that of consultant after the student has exhausted his own means of completing a lesson, project, or activity. (MW)

ED094206 CE001728

INDIVIDUALIZED LEARNING ACTIVATED BY BUSINESS EDUCATORS IN ILLINOIS.

Clow, John, Ed.; Woolschlager, Ruth B., Ed.

Illinois Business Education Association.

Pub Date-74 Note-44p.

EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE

Descriptors-Accounting/*Business Education/Business Education Teachers/Consumer Education/Cooperative Education/Credit (Finance)/Data Processing/*Individualized Instruction/*Individualized Programs/Office Machines/*Office Occupations Education/Typewriting

Identifiers-*Illinois

In the State of Illinois, the Office of the Superintendent of Public Instruction is placing considerable emphasis on the concept of individualized instruction. With this concept in mind this monograph offers a series of teacher-written articles on individualized instruction in business education. The topics covered are: An Overview, by Willie Pyke; Individualized Typewriting, by Earl Flood and Jennie Cox; Individualized Instruction in Shorthand: First and Second Years, by James W. Claxton; Individualized Instruction as Part of a Five-in-One Approach for Teaching Office Machines, by Sharon Anne Fisher; Success in Individualized Accounting, by Carleen Presley; Individualized Instruction in Data Processing, by Dale Manning; A Knight's Daze About Credit, by E. Duane Hill and Thomas O. Stanley; Consumer Education: The Need to Individualize, by John Manzer; Cooperative Education: Individualization from the Start, by Beverly J. Hackett; An Evolving Program for Individualizing Learning: Reflections After Four Years, by Jeanne Dahl. Selected references and a list of IBEA board members are also included. (BP)

ED092730 CE001459

INDIVIDUALIZED INSTRUCTIONAL SYSTEMS FOR VOCATIONAL AND TECHNICAL EDUCATION: A SERIES OF INSTRUCTIONAL MODULES.

Frantz, Nevin R., Jr., Ed.

Pub Date-74 Note-143p.

Available from-Vocational Instructional Systems, Box 54221, Athens, Georgia 30604 ($4.50)

Document Not Available from EDRS.

Descriptors-*Individualized Instruction/Individualized Programs/*Instructional Design/*Instructional Systems/Program Administration/Program Design/Program Development/Program Evaluation/Student Role/Systems Development/Teacher Role/*Technical Education/*Vocational Education

Identifiers-*Instructional Modules

This instructional module was prepared to: (1) acquaint the reader with the terminology and (2) introduce the reader to the procedures of the individualized instructional system found in this volume. The four modules are divided into sections designated: objective, readings, activity, and feedback. Precheck and post-check keys are included. The intended audience is graduate students, supervisors, administrators, and instructors who are interested in the development, operation, and evaluation of an individualized instructional system for vocational and technical education. The document was designed to accompany "Individualized Instructional Systems for Vocational and Technical Education: A Collection of Readings" (CE 001 458). (Author/DS)

ED092729 CE001458

INDIVIDUALIZED INSTRUCTIONAL SYSTEMS FOR VOCATIONAL AND TECHNICAL EDUCATION: A COLLECTION OF READINGS.

Frantz, Nevin R., Jr., ed.

Pub Date-74 Note-212p.; For a related document, see CE 001 459

Available from-Vocational Instructional Systems, Box 54221, Athens, Georgia 30604 ($7.50)

Document Not Available from EDRS.

Descriptors-Curriculum Design/Evaluation/*Individualized Curriculum/*Individualized Instruction/Individualized Programs/*Instructional Systems/Learning Activities/Learning Laboratories/Multimedia Instruction/Program Development/Student Centered Curriculum/Teaching Methods/*Technical Education/*Vocational Education

This collection of readings was prepared for vocational and technical educators who are interested in individualized instruction. The material provides an overview of individualized instruction in vocational and technical education as well as its development, implementation, practice and evaluation. The book is divided into four parts. Part 1 presents several articles about the individual student and procedures for developing an individualized instructional system. In Part 2, the articles deal with implementing individualized instruction. The material in Part 3 describes operational individualized instructional projects and practices in various service areas of vocational education. Part 4 covers the evaluation of an individualized instructional system. A list of references is found at the end of each part for additional reading. The articles should assist the reader in analyzing and comparing various points of view and practice of individualized instruction and hopefully develop some basic concepts about individualized instruction in vocational and technical education. (Author/DS)

ED092174 IR000741

THE ANALYSIS AND DEVELOPMENT OF AN ADAPTIVE INSTRUCTIONAL MODEL(S) FOR INDIVIDUALIZED TECHNICAL TRAINING; PHASE I.

Hansen, Duncan N.; et al.
Air Force Human Resources Lab., Brooks AFB, Texas.
Report No.-AFHRL-TR-72-50(1)
Pub Date-Aug 73 Note-114p.
EDRS Price MF-$0.76 HC-$5.70 PLUS POSTAGE
Descriptors-Aviation Technology/*Computer Assisted Instruction/*Individualized Instruction/Instructional Design/*Instructional Systems/Literature Reviews/Military Training/*State of the Art Reviews/Surveys/*Technical Education
Identifiers-Adaptive Instructional Models/Instructional Algorithms/Instructional Resource Allocation/Instructional Strategies
Shrinking training budgets pose a serious problem to those confronted with the present and future challenge of providing competent Air Force technicians for increasingly technical positions in a modern Air Force. One promising solution to this problem has been to harness the capabilities of the computer as an instructional training device. To be cost-effective, computer-based instruction must maximize individual student attainment of training objectives, while simultaneously minimizing training time and costs. Adaptive Instructional Models (AIM) constitute the means by which effective training can be accomplished with a minimum expenditure of student time and instructional resources. The report describes the purpose and function of AIM. Additionally, seven adaptive instructional models are analyzed, and recommendations as to model application in Air Force technical training courses are made. (Author)

ED078174 VT020343
COMPULEARN CAREER EDUCATION PROGRAM: STUDENT GUIDES, EDUCATOR GUIDES, BIBLIOGRAPHIES AND CAREER INDEX, DATA SHEETS, CAREER COMPUTER, AND PROGRAM CARDS.
Compulearn, Inc., Pittsburgh, Pa.
Spons Agency-Office of Education (DHEW), Washington, D.C.
Pub Date-72 Note-1,000p.
Available from-Compulearn, Inc., 1321 4 Gateway Center, Pittsburgh, PA 15222
Document Not Available from EDRS.
Descriptors-Autoinstructional Aids/*Career Education/Data Sheets/Educational Equipment/*Educational Games/Elementary Grades/*Individualized Instruction/*Instructional Aids/Intermediate Grades/*Occupational Information/Secondary Grades
Identifiers-*Compulearn Career Education Program
The Compulearn system was developed for use in general education, special training, and business and industry to provide individualized instruction for all age groups in a wide range of career areas and occupational fields. The system apparatus consists of a battery-operated "console" box with two plugs, one for questions and one for answers, and a set of plastic program cards for each career concept. To use the system, a program card is selected and placed on the face of the box and the plugs are inserted into the chosen outlets. If the selected answer to the selected question is correct, immediate reinforcement is provided by a light next to the answer. If no light appears, another answer may be probed or a button pushed to get the answer. In addition

to these pieces, the system includes booklets for students and teachers at the elementary, middle, and secondary levels which tell how to operate the program or "play the game" with each card. Another booklet contains a bibliography of books and pamphlets on occupations and careers, with places to write for materials. A listing of career titles and corresponding grade levels is also furnished. A larger booklet of data sheets for various occupations and an information folder complete the package. (MF)

ED078132 VT019926

APPROACHES TO INDIVIDUALIZED INSTRUCTION.

New York State Education Dept., Albany. Bureau of Business Education.

Report No.-Bull-1941

Pub Date-Jun 72 Note-51p.

EDRS Price MF-$0.76 HC-$3.32 PLUS POSTAGE

Descriptors-*Business Education/*Career Education/*Individualized Instruction/Instructional Improvement/*Instructional Materials/Instructional Technology/Research Reviews (Publications)/Resource Guides/Secondary Grades/*Teaching Methods

With the focus now on career education as a catalyst for producing self-sufficient and personally self-fulfilled human beings, efforts are being made to develop teaching techniques which will produce effective learning in the great percentage of the student body enrolled. This document explores some of the more widely used approaches to individualizing instruction in business education in secondary schools. These approaches are: (1) the systems approach, (2) mini-approach (using learning packets), (3) flexible-scheduling approach, (4) learning activity-centered approach, (5) quantitative-timing approach (used in teaching typing), (6) independent study, (7) self-paced instructional approach, (8) team teaching approach, (9) problem-centered approach, (10) accelerated-program approach, and (11) integrated-activity approach. In addition, five recent research studies of special interest to business education teachers are summarized. Significant issues in program development in New York State and a variety of instructional materials appropriate for use in business education classes are included. (SN)

ED072256 VT018739

INDIVIDUALIZATION OF EDUCATION IN CAREER EDUCATION. FINAL REPORT.

Dunn, James A.; et al.

American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.

Spons Agency-Far West Lab. for Educational Research and Development, Berkeley, Calif.

Report No.-AIR-28600-6-72

Pub Date-Jun 72 Note-167p.

EDRS Price MF-$0.76 HC-$8.24 PLUS POSTAGE

Descriptors-*Career Education/*Career Planning/Curriculum Design/Data Bases/Decision Making/Educational Objectives/Goal Orientation/Individual Development/*Individualized Instruction/*Information Systems/Instructional Materials/*Program Development/Student Ability/Student Development/Student Interests/Teaching Procedures

Individualization of education has been variously defined, from fairly narrow and circumscribed to fairly extensive and comprehensive definitions. The development of a comprehensive procedure for the individualization of education involves consideration of such factors as family/personal, instructional systems, data access, and decision rule factors. In order to be effective, a comprehensive empirically-oriented system for individualized career education must have such attributes as: (1) a cross-indexed set of instructional resources, (2) the identification of the individual student's long-range goals, (3) a bank of data with regard to the individual, his interests, and abilities, (4) a specification of state and local school system requirements, (5) an information system to provide for the confluence of these data, and (6) a set of decision rules whereby educational planning can be effected. Included in this publication are chapters providing: (1) definitions of individualization of education, (2) descriptions of early and contemporary efforts at individualization, and (3) discussions of the attributes of a successful individualized career education program. (SB)

ED069851 VT017093

AN EVALUATION THROUGH FIELD TESTING OF INDIVIDUALIZED INSTRUCTION MATERIALS IN WISCONSIN POST-SECONDARY INSTITUTES. FINAL REPORT AND APPENDICES.

Lambrecht, Judith J.; et al.

Wisconsin Univ., Madison.

Spons Agency-Office of Education (DHEW), Washington, D.C.; Wisconsin State Board of Vocational, Technical, and Adult Education, Madison.

Pub Date-Aug 72 Note-278p.

EDRS Price MF-$0.76 HC-$14.59 PLUS POSTAGE

Descriptors-Ability Identification/Educational Research/*Effective Teaching/*Individualized Instruction/*Post Secondary Education/*Program Evaluation/*Vocational Education

Identifiers-Wisconsin

To determine the relative levels of achievement of students enrolled in courses designed to permit individualized instruction and to determine those courses or instructional aspects considered effective or ineffective in achieving objectives, achievement data on 1,204 students within the post-secondary institutes of the Wisconsin vocational education system were gathered from school records, and background data were obtained by questionnaire. Critical incidents were obtained through personal interviews with 224 students and 28 teachers. Analyses were performed contrasting student achievement and the critical incidents across subject areas, across technical school districts, within separate subject areas, and across five models of individualized instruction and four class scheduling patterns. Some principal findings were: (1) Higher grades and fewer course incompletes or withdrawals were received by students who possessed these characteristics, previous experience in the subject, high school graduation, and enrollment in an associate degree program; and (2) Course characteristics which were most effective included student-pacing of their own programs, use of pretesting to place students within a course, student selection of special study topics, and use of different types of testing procedures. (Several pages may be light.) (SB)

ED066586 VT016454

AN ASSESSMENT OF CURRENT AND PROJECTED INDIVIDUALIZED INSTRUCTION IN BUSINESS AND MARKETING COURSES PROVIDED BY THE DISTRICTS OF THE WISCONSIN VOCATIONAL, TECHNICAL, AND ADULT EDUCATION SYSTEM. FINAL REPORT.

Wisconsin Univ., Madison.

Spons Agency-Wisconsin State Board of Vocational, Technical, and Adult Education, Madison.

Pub Date-Nov 71 Note-49p.

EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE

Descriptors-Adult Education/*Annotated Bibliographies/*Business Education/*Curriculum Planning/*Individualized Instruction/*Marketing/Post Secondary Education/Student Attitudes/Teacher Attitudes/Vocational Education

Based on interviews with a representative of each of the 18 Vocational, Technical, and Adult Education Districts of Wisconsin, this study sought to determine the present and future use of individualized instruction in business and marketing offerings. Analysis of the interview data revealed that: (1) 12 of the 18 districts reported business or marketing courses which were utilizing individualized instruction, (2) 11 districts anticipated adding courses with individualized instruction, (3) The most frequently offered courses were typewriting, shorthand, business mathematics, and communications, (4) Most of the courses were at the national level and many were designed for remedial or special needs students, and (5) Students and teachers both exhibited a positive attitude toward individualized instruction. (JS)

ED058454 VT014592

THE EFFECTIVENESS OF AN INDIVIDUALIZED LEARNING METHOD OF INSTRUCTION WHEN COMPARED TO THE LECTURE-DISCUSSION METHOD. A RESEARCH REPORT OF A GRADUATE STUDY.

Oen, Urban T.; Sweany, H. Paul

Michigan State Univ., East Lansing. Dept. of Secondary Education and Curriculum.

Report No.-Prof-Ser-Ag-Ed-1

Pub Date-Sept 71 Note-41p.

EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE

Descriptors-*Agricultural Education/*Discussion (Teaching Technique)/Doctoral Theses/Educational Research/*Effective Teaching/High School Students/*Individualized Instruction/Lecture/Ornamental Horticulture/Post Testing/Pretesting/Secondary Grades/Teaching Methods/Teaching Techniques/*Turf Management/Vocational Agriculture

To compare the effectiveness of individualized and lecture-discussion methods with a non-instruction (Control) method in developing turfgrass competencies in 11th and 12th grade students as measured by achievement in a battery of tests, teachers from 29 Michigan schools were randomly placed in three groups and attended workshops where they were provided with manuals, accompanying slides, audiovisual and curriculum materials, and an explanation of the study procedures. Five antecedent variable pretests were administered to the 632 students, and at the conclusion of the project, a battery of seven posttests was completed. Results revealed that the mean posttest scores were higher for students taught by the two instructional methods than the control

group, and the mean posttest scores of students receiving individualized instruction were significantly higher than those receiving the lecture-discussion method after removing the variance attributed to each of the antecedent variables. However, when the posttest scores were analyzed as a composite package, there were no significant differences between the two instructional methods. The individualized method was also significantly more successful in developing student ability to locate and interpret information contained in turfgrass references. (SB)

ED058389 VT013338

REVIEW AND SYNTHESIS OF RESEARCH ON INDIVIDUALIZING INSTRUCTION IN VOCATIONAL AND TECHNICAL EDUCATION.

Impellitteri, Joseph T.; Finch, Curtis R.

Ohio State Univ., Columbus. The Center for Vocational Education.

Spons Agency-Office of Education (DHEW), Washington, D.C.

Report No.-Inf-Ser-43

Pub Date-Jul 71 Note-90p.

Available from-Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock No. 1780-0798, $0.50)

EDRS Price MF-$0.76 HC-$4.43 PLUS POSTAGE

Descriptors-Computer Assisted Instruction/Computer Oriented Programs/*Educational Development/Educational Improvement/Educational Objectives/Educational Research/Educational Strategies/Educational Technology/*Individualized Instruction/Instructional Design/Programed Instruction/*Research Reviews (Publications)/Simulation/Student Characteristics/*Technical Education/*Vocational Education

An integrated framework for individualized instruction in vocational and technical education could consist of five components, including the student, teacher, environment, instructional content, and mediation. In this review, research and development materials identified through a computer search of materials in the Educational Resources Information Center (ERIC), are grouped according to this framework. Sections are: (1) Issues in the Design of Individualized Instruction, emphasizing the teacher component, (2) Student Characteristics Research, emphasizing the student component, (3) Educational Technology, emphasizing the mediation component, (4) Instructional Strategies, emphasizing the teacher component, and (5) Instructional Systems Approaches, emphasizing research which takes a more integrated approach to individualized instruction. Studies relating to the instructional component are located throughout the sections. It was recommended that cooperative efforts of practitioners and researchers, including doctoral students, are needed to improve the current status of individualized instruction. We must also acknowledge and utilize selected ideas and devices initially developed for military use. (SB)

ED057184 VT013713

WHAT VOCATIONAL EDUCATION TEACHERS SHOULD KNOW ABOUT INDIVIDUALIZING INSTRUCTION.

Bjorkquist, David

Ohio State Univ., Columbus. The Center for Vocational Education.
Spons Agency-Office of Education(DHEW), Washington, D.C.
Report No.-Inf-Ser-49
Pub Date-Nov 71 Note-15p.
EDRS Price MF-$0.76 HC-$1.58 PLUS POSTAGE
Descriptors-*Educational Objectives/Individual Characteristics/*Individualized Instruction/Learning Characteristics/*Learning Processes/*Student Characteristics/Teacher Role/*Vocational Education/Vocational Education Teachers

Teachers are increasingly becoming managers of the learning process rather than dispensers of knowledge and are being challenged to individualize their instruction to account for variability. Classroom objectives, characteristics of the learner, and the learning process are the focal points of this publication. Although there will continue to be considerable trial and error in individualizing instruction, the vocational teacher can use the following general guidelines: (1) The task to be learned should be divided into components which can be accomplished by the learner, (2) The instructional program should begin at a point commensurate with the learner's capabilities and prior knowledge, and (3) Principles by which individuals learn should be used in planning and selecting individualized instruction. (Author/JS)

ED055240 08 VT014100
THE DEVELOPMENT OF INDIVIDUALIZED INSTRUCTION IN VOCATIONAL EDUCATION. FINAL REPORT.
Brandau, George C.
Willingboro Public School District, N.J.
Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.
Bureau No.-BR-9-0538
Grant-OEG-0-9-400538-4586(010)
Pub Date-28 Dec 70 Note-73p.; Report dealing with the teacher training institute held at Willingboro Memorial Junior High School (Willingboro, N.J., July 21-August 7, 1969)
EDRS Price MF-$0.76 HC-$3.32 PLUS POSTAGE
Descriptors-*Behavioral Objectives/Change Agents/*Educational Change/Educational Innovation/*Individualized Instruction/*In-service Education/Instructional Materials/Program Development/Summer Institutes/Teacher Workshops/*Vocational Education/Vocational Education Teachers
Identifiers-ES 70

This teacher training institute was aimed primarily at developing teacher efficiency in the writing of behavioral objectives and in developing individualized instructional programs. The grant for the in-service program came as a result of communication between the schools of the ES '70 network which highlighted the need for training in these areas, including the construction of learning packages. Therefore, it was a major objective of the institute to encourage development of skills in writing behavioral objectives, with the hope that participants would apply these skills in implementing individualized programs in their home districts. A follow-up workshop, which addressed the institution of change and the role of the change agent, was conceived as a result of difficulties encountered by the above ES '70 schools in implementing

new programs. Specific attention was given to the problems encountered when one attempts to change curriculum and methodology in the high schools. An evaluation of both sessions is included in this report. (JS)

ED044523 24 VT012059

A STUDY TO EVALUATE THE EFFECTIVENESS OF AN INDIVIDUAL STUDY APPROACH TO ASSOCIATE DEGREE NURSING. FINAL REPORT.

White, Gerry J.

El Centro Coll., Dallas, Tex.

Spons Agency-National Center for Educational Research and Development (DHEW/CE), Washington, D.C.

Bureau No.-BR-8-G-061

Grant-OEG-7-9-000061-0087-010

Pub Date-Jul 70 Note-108p.

EDRS Price MF-$0.76 HC-$5.70 PLUS POSTAGE

Descriptors-Academic Achievement/Associate Degrees/Community Colleges/ Conventional Instruction/*Course Evaluation/*Health Occupations Education/ *Individualized Instruction/Learning Activities/*Nursing/*Teaching Techniques

To determine whether an individualized approach to learning would help overcome the problems of crowded student schedules, heterogeneous ability groupings, and inexperienced teachers, 110 freshmen and sophomore students in a community college nursing program were divided by grade level into two control groups which received traditional lectures, and two experimental groups which received taped lectures and small seminars. Though analysis of pretest and posttest scores did not indicate that the individualized approach resulted in significantly higher achievement levels, the achievements were as good as the traditional approach. As a result of the findings, it was recommended that the individualized approach be expanded to include all nursing courses, and that a listening laboratory be established for the nursing program with carrels, tape recorders, and film projectors. Several course outlines and study instruments and materials are appended. (SB)

ED042857 UD010588

A LEARNING MANAGEMENT MODEL DESIGNED TO INDIVIDUALIZE THE LEARNING OF SKILLS, CONCEPTS, AND ATTITUDES INHERENT IN THE CLERICAL SECTOR OF LEARNING.

Alson, Allan L.

Seattle Public Schools, Wash. Southeast Educational Center.

Pub Date-18 Aug 70 Note-12p.

EDRS Price MF-$0.76 HC-$1.58 PLUS POSTAGE

Descriptors-Activity Learning/*Business Education/Clerical Occupations/ *Curriculum Development/Educational Strategies/Experimental Curriculum/*High School Curriculum/*Individual Instruction/Nongraded Classes/Office Practice/ *Skill Development/Student Attitudes/Typewriting

Identifiers-Clerical Sector of Learning Opportunity Program/Clerical SOLO Program/Washington

Clerical SOLO (Sector of Learning Opportunity), a program attempting individualized learning of concepts, skills, and attitudes traditionally taught in office practice and machines, was implemented during the 1969-70 school year

by the Business Education Department of Rainier Beach High School. The Clerical SOLO curriculum model has accomplished this by providing an opportunity for a student to determine relevant learning objectives, to learn in a manner that suits him best, to learn at his own rate, and to be actively involved with the evaluation of his performance. Activities that tend to create an inaccurate self-concept such as arbitrary scheduling, ability grouping, and grading have been eliminated. On the average, rates of learning increased over the semester. Students indicated a preference for the Clerical SOLO learning experience over other traditionally taught business education subjects. Instructional costs decreased by 16.7 percent even withstanding an increase of adult contact and supervision. Given that the above benefits did occur without sacrificing student achievement, the Clerical SOLO will be continued with continual refinement. (Author/JM)

VT101329

Jun 74

INDIVIDUALIZED INSTRUCTION IN OCCUPATIONAL EDUCATION (THE SANFORD PROJECT).

Sanford Central High School, N.C.

300

MF Available in VT-ERIC Set.

Descriptors-Programed Materials/*Individualized Instruction/*Individualized Curriculum/Occupational Information/*Instructional Systems/Flexible Scheduling/*Program Development/*Vocational Education

Identifiers-*North Carolina

The goal of this project was to design a high school occupational curriculum so that students would have flexibility in scheduling and sequencing the instructional modules necessary to prepare them for their career objectives. Four mechanisms for individualizing instruction were employed in the project: mini-courses, automated instruction, learning activity packages, and task packages, which served as the primary instructional method. Instructional programs were developed for typing, distributive education, masonry, carpentry, metals, and drafting and were implemented in 16 schools designated as demonstration sites. General conclusions after evaluation of the project indicate that an individualized instruction system, if properly designed, is of benefit to most students and that the increased cost of funding such a program is justified. Examples of student task packages, forms and charts used throughout the project are included in the appendices. (KH)

VT101135

74

Sewell, Susan

A COMPARATIVE ANALYSIS OF STUDENT ATTITUDES TOWAPD INDIVIDUALIZED AND TRADITIONAL INSTRUCTION. FINAL REPORT.

Southwest Wisconsin Vocational-Technical School, Fennimore.

100

MF Available in VT-ERIC Set.

Descriptors-*Teaching Methods/*Individualized Instruction/*Conventional Instruction/*Student Attitudes/*Student Opinion/School Surveys/Educational Attitudes

To determine student attitudes toward traditional and individualized instruction, 152 students were surveyed for their opinions. The students responded to 25 statements about each type of instruction saying whether they strongly disagreed, were uncertain, agreed, or strongly agreed with each statement. Findings indicate that students prefer individualized over traditional instruction but they have favorable attitudes toward both methods suggesting that both types of instruction are needed. (MU)

VT100749
73
Cook, William R.
INDIVIDUALIZING INSTRUCTION IN DISTRIBUTIVE EDUCATION.
Minnesota State Dept. of Education, St. Paul.
100
MF Available in VT-ERIC Set.
Descriptors-*Methods Research/*Individualized Instruction/*Distributive Education/Secondary School Students/Research
Summarized in this document are the highlights of a study conducted during the period of July 1, 1972 through June 30, 1974, to determine the effects of social life styles of personality upon individualized instructional learning for distributive education high school seniors. A total of 18 cluster-sampled Minnesota high schools participated in this investigation which utilized data from Likert-Like Attitudinal Rating Scales and cognitive tests to obtain findings. The findings as well as the sampling procedures and statistical figures obtained are included in the body of the report. (SN)

VT100585
70 M.A. Thesis, Utah State Univ., Logan.
Burton, David M.
A LISTING OF PROGRAMMED INSTRUCTIONAL MATERIALS FOR INDUSTRIAL EDUCATION.
900
MF Available in VT-ERIC Set.
Descriptors-*Individualized Programs/*Industrial Arts Teachers/*Industrial Education/*Programmed Materials/*Textbook Publications/Masters Theses/Publications
Because industrial education teachers very often make use of demonstrations coupled with individualized reading programs for each student, they need resources for the separate learning programs. This list of commercially published programmed materials was compiled to aid industrial education teachers in giving that added dimension to their students' instructional education teachers. More than 40 subject areas contain over 600 commercially published programs of instruction in the listing of the following industrial education fields: (1) crafts, (2) drafting, (3) electrics, (4) graphic arts, (5) power technology, (6) metals, (7) production technology, (8) safety, and (9) woodwork. The program title, length, student level, list price, and publisher are given for each entry. Findings, conclusions, recommendations, bibliography, and appendix of this study which produced this listing are lacking from the document. (MU)

VT100163
Jun 72
Koble, Ronald L.
A MODULAR SCHEDULING PROGRAM FOR VOCATIONAL-TECHNICAL SCHOOLS: A DEMONSTRATION MODEL. FINAL REPORT (PHASE I).
Pennsylvania State Univ., University Park.
300
MF Available in VT-ERIC Set.

Descriptors-*Area Vocational Schools/*Curriculum Design/Demonstration Programs/*Individualized Curriculum/*Schedule Modules/Advisory Committees/ Meetings/Program Development/Vocational Education

Identifiers-*Pennsylvania

The goal of this study was to develop a systematic method or model for individualizing instruction and scheduling in area vocational-technical schools. To carry out this goal, the Admiral Perry Area Vocational-Technical School (APAVTS) was planned and established to serve five of the school districts in Cambria County, Pennsylvania. Major activities were the division of 20 curriculum areas into skill and knowledge components and the development of computer programs to implement individual student and teacher scheduling. The 20 curriculum areas, grouped into vocational programs in agriculture, automotive, building construction, metal and material, services, and technical careers, were divided into logical content segments called units, modules, and tasks. Each segment or module of instruction will be the multiple of a standardized unit of time, permitting individualization of the programs according to student learning capabilities. The report presents the program research and development and a listing by program areas of modules and tasks in each unit. The bulk of the document is comprised of the minutes of the APAVTS Technical Advisory Committee meetings. It is planned that the module scheduling activities will be continued and implemented at APAVTS during the 1972-73 school year. (MF)

VT018741

Jun 72

Dunn, James A.

THE GUIDANCE PROGRAM IN THE PLAN SYSTEM OF INDIVIDUALIZED EDUCATION.

American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.

900

EDRS Price MF-$0.65 HC-$3.29

AIR-PLAN-6/72

Descriptors-Resource Materials/Goal Orientation/*Individualized Instruction/*Career Education/*Program Descriptions/*Occupational Guidance/Developmental Programs/Vocational Development/Integrated Curriculum/Relevance (Education)/Visual Aids/Parent Role/Vocational Interests/Occupational Aspiration/ *Computer Oriented Programs

Identifiers-PLAN/Project Talent/*Program for Learning in Accordnace with Needs

PLAN (A Program for Learning in Accordance with Needs) is the outgrowth of a follow-up study, project talent, on the occupational aspirations of over 400,000 high school students. As the second of three major theoretical components in that comprehensive developmental individualized education program this occupational guidance system is integration into the regular academic program. To pursue relevance to student needs, to accommodate parental interests in their children, and to delimit the instructional resources available in plan, seven career education and guidance subcomponents were created, and computer-oriented individualized programs of study were generated. These seven programs are described: (1) curriculum planning and coordination,

(2) orientation and study skills, (3) career and vocational information, (4) student goal formulation, (5) individual planning, (6) student assessment and progress monitoring, and (7) military, college, and post-secondary counseling. A wide range of visual aids and resource materials are provided, including a glossary of key concepts in PLAN and sample program materials. (AG)

VT018739
Jun 72
Dunn, James A.; et al.
INDIVIDUALIZATION OF EDUCATION IN CAREER EDUCATION. FINAL REPORT.
American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.
900
EDRS Price MF-$0.65 HC-$6.58.
AIR-28600-6/72
Descriptors-*Career Education/*Individualized Instruction/Goal Orientation/*Career Planning/Decision Making/Educational Objectives/Data Bases/*Program Development/*Information Systems/Instructional Materials/Student Development/Curriculum Design/Student Interests/Teaching Procedures/Student Ability/Individual Development

Individulization of education has been variously defined, from fairly narrow and circumscribed to fairly extensive and comprehensive definitions. The development of a comprehensive procedure for the individualization of education involves consideration of such factors as family/personal, instructional systems, data access, and decision rule factors. In order to be effective, a comprehensive empirically-oriented system for individualized career education must have such attributes as: (1) a cross-indexed set of instructional resources, (2) the identification of the individual student's long-range goals, (3) a bank of data with regard to the individual, his interests, and abilities, (4) a specification of state and local school system requirements, (5) an information system to provide for the confluence of these data, and (6) a set of decision rules whereby educational planning can be effected. Included in this publication are chapters providing: (1) definitions of individualization of education, (2) descriptions of early and contemporary efforts at individualization, and (3) discussions of the attributes of a successful individualized career education program. (SB)

VT016455
72 334p.
CAREER CHOICE AND CAREER PREPARATION.
Washington State Coordinating Council for Occupational Education, Olympia.
EDRS Price MF-$0.65 HC-$13.16
Descriptors-*Study Guides/Visual Aids/*Autoinstructional Aids/Secondary Grades/Occupational Guidance/*Career Choice/Occupational Information/Resource Materials/*Individualized Instruction/Vocational Education/Career Opportuniites/Training Programs/Vocational Development/*Educational Opportunities
Identifiers-Career Awareness/Economic Awareness

This innovative study guide provides individualized occupational guidance for students in the secondary grades by means of autoinstructional reading

materials covering career choice and career preparation. The student is asked to answer certain questions which narrow down his interests and qualifications, and on the basis of the answers he is instructed to turn to specific pages in the document. Jobs available to the high school graduate and dropout are described, including salaries, employment requirements, job locations, employment outlook, and sources of further information. Photographs illustrate the text, developed by a university educator and a training commander in the Air Force. Apprenticeship programs and federal employment programs are briefly discussed. Descriptions of community colleges and post-secondary vocational schools in Washington State include a chart alphabetically keying the institutes to specific vocational preparation programs which are offered. A map of school locations in Washington State is included. (AG)

VT016454

Nov 71 49p.

AN ASSESSMENT OF CURRENT AND PROJECTED INDIVIDUALIZED INSTRUCTION IN BUSINESS AND MARKETING COURSES PROVIDED BY THE DISTRICTS OF THE WISCONSIN VOCATIONAL, TECHNICAL, AND ADULT EDUCATION SYSTEM. FINAL REPORT.

Wisconsin Univ., Madison.

EDRS Price MF-$0.65 HC-$3.29.

Descriptors-*Business Education/*Individualized Instruction/*Marketing/ Adult Education/Vocational Education/Post-Secondary Education/*Curriculum Planning/*Annotated Bibliographies/Student Attitudes/Teacher Attitudes

Based on interviews with a representative of each of the 18 vocational, technical, and adult education districts of Wisconsin, this study sought to determine the present and future use of individualized instruction in business and marketing offerings. Analysis of the interview data revealed that: (1) 12 of the 18 districts reported business or marketing courses which were utilizing individualized instruction, (2) 11 districts anticipated adding courses with individualized instruction, (3) the most frequently offered courses were typewriting, shorthand, business mathematics, and communications, (4) most of the courses were at the national level and many were designed for remedial or special needs students, and (5) students and teachers both exhibited a positive attitude toward individualized instruction. (JS)

VT016350

04 Dec 71 18 p. Presentation at Annual Convention of American Vocational Association (December 4, 1971)

Finch, Curtis R.; Impellitteri, Joseph T.

RESEARCH ON INDIVIDUALIZING INSTRUCTION IN VOCATIONAL AND TECHNICAL EDUCATION: STATUS AND PROSPECTS.

MF Available in VT-ERIC Set.

Descriptors-*Research Reviews (Publications)/Synthesis/*Individualized Instruction/Multiple Regression Analysis/Research Methodology/*Research Needs/ Systems Approach/*Vocational Education/*Speeches/Technical Education

The current status of research on individualizing instruction in vocational and technical education was outlined in 11 observations by the first speaker at an annual convention, stressing the value of the systems approach and the effectiveness of military training research. After reviewing a synthesis of

research in this area, future research prospects and recommended approaches are specified by the second speaker, including a discussion of multivariate regression analysis and programmatic development needs. (AG)

VT011921

June 70 49p.

Lambert, Roger H., ed; Meaders, O. Donald, ed.

GUIDELINES: INDIVIDUALIZING INSTRUCTION IN AGRICULTURE.

Michigan State Univ., East Lansing. Dept. of Secondary Education.

MF Available in VT-ERIC Set.

Descriptors-*Agricultural Education/*Individualized Instruction/*Agricultural Occupations/*Guidelines/*Individual Instruction/Teaching Techniques/Secondary Grades/Bibliographic Citations

Intended to serve as a guide for planning instruction which will meet the needs of various individuals enrolled in the same calss or program, these guidelines for individualizing instruction were developed by the agricultural education staff at Michigan State University using teachers of agriculture to test various approaches to individualizing instruction. The major parts are: (1) individualized instruction described, (2) developing individualized instruction, and (3) the guidelines in perspective--an overview and synthesis. Appended are a selected bibliography and an example of how units are organized and might be used. (GB)

VT011473

70 315p.

Resnick, Harold S.

THE IMPLEMENTATION OF FLEXIBLE MODULAR SCHEDULING FOR INDUSTRIAL EDUCATION.

Document Not Available from EDRS.

Descriptors-Bibliographies/Doctoral Theses/*Flexible Scheduling/*Industrial Education/*National Surveys/*Schedule Modules/Secondary Schools

Identifiers-*Flexible Modular Scheduling

To provide a guide for implementation of flexible modular scheduling for industrial education, this study examined the industrial education departments of schools utilizing the scheduling and determined the administrative and instructional procedures employed by them. The following conclusions and recommendations were based on 64 (83.1 percent) returned instruments: (1) formal arrangement for industrial education existed even though the school was experimenting with an innovative program, (2) large group instruction was used by almost 50 percent of the schools, primarily as a one-teacher presentation, (3) structured laboratory sections have been reduced from 5 hours to approximately 2 hours per week, and generally follow the same pattern as traditional laboratory activities, (4) most schools allocate to their students approximately 40 percent unscheduled time, (5) student honor system is used in respect to safety, clean-up, tool usage, and attendance during open lab mods, (6) there is a lack of adequate paraprofessional support and differentiated staffing patterns, (7) very few schools have a resource center, and (8) a general pattern includes one large group meeting per week, two structured labs and the use of open labs. This Ed.D. thesis was submitted to Wayne State University. (GR)

VT011472
Apr 70 22p.
Resnick, Harold S.
THE IMPLEMENTATION OF FLEXIBLE MODULAR SCHEDULING FOR INDUSTRIAL EDUCATION.
Wayne State Univ., Detroit, Mich. Dept. of Industrial Education.
MF Available in VT-ERIC Set.
Descriptors-*Industrial Education/*Flexible Scheduling/*Schedule Modules/*National Surveys/Doctoral Theses/Bibliographies/Secondary Schools
Identifiers-*flexible Modular Scheduling
The Implementation of Flexible Modular Scheduling for Industrial Education" is summarized. For abstract of full report, see ED 043 738 (VT 011 473, ARM Spring 1971). (GR)

VT011399
1,041p.
INDIVIDUALIZED MATERIAL FOR INDUSTRIAL EDUCATION BASED ON THE AVA BOOKLET "A GUIDE TO IMPROVING INSTRUCTION IN INDUSTRIAL ARTS."
EDRS Price MF-$4.00 HC-$52.15
Descriptors-*Curriculum Development/Individualized Curriculum/Individualized Instruction/*Individualized Programs/*Industrial Arts/Industry/*Instructional Materials/Simulation/*Teacher Developed Materials
Identifiers-American Vocational Association/AVA/*Experienced Teacher Fellowship Program/EXTFP
This package of individualized curriculum materials for industrial arts, developed by the 1969-70 experienced teacher fellowship program for teacher and student use, is a result of an in-depth study of the 1968 revision of the American Vocational Association's booklet, "A Guide to Improving Instruction in Industrial Arts." The 10 major units included are: (1) industry and civilization, (2) the industry, (3) organization and management, (4) research and development, (5) planning for production and manufacturing, (6) production and manufacturing, (7) distribution, (8) service, (9) hand tools and simple machines, and (10) sophisticated machines. Each unit, identified by a prefix letter, contains color coded individualized packages of information for student use, teacher use, and teacher reference information which outlines special preparations or materials required for student or teacher packages. Each package within the unit is designed to be flexible for use in grade 7 through grade 12 and with slight modification it can be used for lower or higher grades. Several teacher-designed simulation games about industry are included. A related document is available as ED 024 814 (RIE, April 1969). (GR)

VT011005
67 141p.
Armstrong, William Harrell
AN EXPERIMENTAL INVESTIGATION OF THE INSTRUCTIONAL EFFECTIVENESS OF PUBLISHED PROGRAMED INSTRUCTION MATERIALS VS. INDIVIDUALIZED INSTRUCTION IN AREA VOCATIONAL-TECHNICAL SCHOOLS.
Document Not Available from EDRS.
University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Mich. 48106.

Descriptors-*Teaching Methods/Doctoral Theses/Bibliographies/*Programed Instruction/Programed Materials/*Educational Research/Program Effectiveness/ *Individualized Instruction/Area Vocational Schools/Tables (Data)

To compare the instructional effectiveness of published programed instructional materials with individualized instruction, 376 of a possible 1,500 students enrolled in seven curriculums in two area vocational schools were involved in an 18-month experimental study. The 184 students in the control group and 192 students in the experimental group were administered a pretest, posttest, and a retention test to measure achievement, retention, and time to complete assigned instructional materials. A substantial part of the experiment dealt with the preparation of teachers. Findings at the .05 level concluded: (1) there was no significant difference between achievement means or retention means, and (2) there was a significant difference between the two samples time means for the two methods of instruction. Numerous charts support the data. Specific recommendations for vocational trade and industrial education are: (1) efforts should be made to introduce programed instruction to other areas, (2) there should be experimentation with programed instruction in problem solving, planning, and portions of skills development, and (3) content of programed materials should be appropriate and reflect a high quality. Further study is recommended. This Ph.D. dissertation was submitted to Florida State University. (GR)

JOURNAL ARTICLES

EJ115539 CE502915

BASIC BUSINESS GOES "MOD"

Bronner, Michael; Becket, Alvin C. Journal of Business Education; 50; 7; 293-4 Apr 75

Descriptors-*Business Education/*Teaching Techniques/*Curriculum Development/*Schedule Modules/Individualized Instruction/Secondary Education

The module approach appears to have much to offer a business education curriculum. (Author)

EJ113848 CE502783

CHOICES FOR TEACHERS TOO--WHEN THEY "INDIVIDUALIZE." PART III

Lambrecht, Judith J. Journal of Business Education; 50; 6; 237-8 Mar 75

Descriptors-*Business Education/*Individualized Instruction/*Scheduling/*Secondary Education/*Program Effectiveness/Flexible Scheduling/Post-Secondary Education

A way to depict the kind of instructional organization used in an individualized course is to describe the kind of scheduling arrangements possible for students. This aspect of 23 business courses included in one statewide evaluation is the focus of attention in this article. (Author)

EJ113759 CE502662

PROCEDURES FOR INDIVIDUALIZING STUDY IN ACCOUNTING

Gruber, Gene Balance Sheet; 56; 5; 260-1 Mar 75

Descriptors-*Individualized Instruction/*Business Education/*Accounting/*Effective Teaching/*Student Needs/Secondary Education/Teaching Methods/Educational Problems

The article outlines some of the problems encountered by the accounting teacher in solving student needs, some of the benefits of individualized study, and steps needed for adequate advance preparation. (MW)

EJ112169 CE502548

TECHNICAL PHYSICS TAILORED TO STUDENT NEEDS

Slapar, Frank M. American Vocational Journal; 49; 9; 43-4 Dec 74

Descriptors-*Community Colleges/*Physics/*Individualized Programs/*Flexible Scheduling/*Technical Education/Educational Innovation/Physics Instruction/Schedule Modules/Individualized Instruction

When a community college in Kansas organizeds its technical physics courses in six modules for flexible scheduling, a series of innovations developed: videotaping the instruction led to individualized programs for students and freedom of movement through the physics component of the technical programs. (Author/AJ)

EJ110462 CE502282

INDIVIDUALIZED INSTRUCTION PACKAGES MADE EASY

Teal, Dean Industrial Education; 64; 1; 28-30 Jan 75

Descriptors-*Work Experience Programs/*Individualized Instruction/*Instructional Materials/*Cooperative Education/*Program Coordination/Task Analysis/Teacher Developed Materials/Coordinators/Classroom Materials/Records (Forms)

A 12-step procedure is offered to help cooperative education coordinators develop and build the individualized packages necessary to relate classroom instruction with work experience in their courses. Sample forms illustrate the process of setting behavioral objectives based on task analysis. (AJ)

EJ107142 CE502206

INDIVIDUALIZED SHORTHAND INSTRUCTION: INSTALLATION OF AN INNOVATION

Banks, Jane M. Business Education World; 55; 2; 12-3, 25 Nov/Dec 74

Descriptors-*Stenography/*Instructional Innovation/*Individualized Instruction/*Business Education/Course Objectives/Learning Experience/Program Development/Activity Units/Job Skills

The Brookdale Community College, Lincroft, New Jersey offers business education students an individualized shorthand instruction program designed for vocational skill development. (EA)

EJ107064 CE502052

INDIVIDUALIZED INSTRUCTION SPEEDS MACHINE FOOD OPERATOR TRAINING

Training and Development Journal; 21; 12; 16-8 Dec 74

Descriptors-*Individualized Instruction/*Trade and Industrial Education/*Machine Tool Operators/*Inplant Programs/*Training Techniques/Skilled Occupations/Industrial Training/On-the-Job Training/Skill Development

EJ107010 CE501991

INDIVIDUALIZED INSTRUCTION BY USING A CONTRACT

Trabont, Susan H. Business Education Forum; 29; 3; 14-5 Dec 74

Descriptors-*Business Education/*Typewriting/*Individualized Instruction/*Performance Contracts/Student Motivation/Student Interests

EJ106989 CE501966

INDIVIDUALIZED TEACHING-NEGATIVE REPORT

Swindle, Robert E. Journal of Business Education; 50; 2; 61 Nov 74

Descriptors-*Individualized Instruction/*Educational Assessment/*Educational Experiments/*Business Education/*Teaching Methods/Evaluation Criteria/Educational Diagnosis/Educational Research

EJ105467 CE501898

LET'S OFFER PROGRAMS INSTEAD OF COURSES

Johnson, Alan D.; Cadagin, James H. Illinois Career Education Journal; 32; 1; 23-5 F 74

Descriptors-*Vocational Education/*Time Factors (Learning)/*Program Planning/*Unit Plan/*Instructional Programs/Courses/Area Vocational Schools/ Educational Objectives/Educational Accountability

The authors offer suggestions for planning vocational programs in area vocational schools that allow for individual student needs, time constraints of the school day/school year, priority of study units, and the arrangement of units into effective learning sequences. (EA)

EJ105466 CE501897

AN ILLINOIS CURRICULUM DEVELOPMENT--INDIVIDUALIZED PROGRESSION IN OCCUPATIONAL EDUCATION

Wray, Ralph D. Illinois Career Education Journal; 32; 1; 20-2 F 74

Descriptors-*Individualized Instruction/*Curriculum Development/*Vocational Education/*Vocational Education Teachers/*In-Service Teacher Education/ Instructional Materials/Teacher Developed Materials

Identifiers-*Illinois

The self-instructional materials package designed for all occupational teachers, regardless of specialization field, is available on a free-loan basis from Illinois Curriculum Management Center, 1035 Outer Park Drive, Springfield, Illinois. (EA)

EJ105433 CE501864

A CONSORTIUM FOR ACCOUNTABILITY

Hirst, Ben A., Jr.; Childers, Bob E. Technical Education Reporter; 1; 3; 5-6 Sep/Oct 74

Descriptors-*Consortia/*Vocational Education/*Technical Education/*Performance Based Education/*Curriculum Development/Southern States/Training Objectives/State Federal Aid/Curriculum Guides/Criterion Referenced Tests

Identifiers-Vo Tech Education Consortium of States/VTECS

The Vocational-Technical Education Consortium of States has as its primary goal the development of catalogs containing performance objectives and criterion-referenced measures in occupational education. Reducing duplication of efforts, sharing costs, improving content validity, and promoting performance-based instruction are among other objectives. (AJ)

EJ105389 CE501820

INVOLVE STUDENTS IN DEVELOPING INDIVIDUALIZED DE TRAINING PLANS

Koeninger, Jimmy G.; Friedemann, Gus W. Business Education Forum; 29; 2; 29-30 Nov 74

Descriptors-*Distributive Education/*Marketing/*Individualized Instruction/*Student Centered Curriculum/Business Education/Student Role/Career Planning/Career Choice/Teaching Techniques

EJ105367 CE501798

MASTERY LEARNING: FACT OR FICTION?

Garner, Raymond Agricultural Education Magazine; 47; 6; 123-4, 6 Dec 74

Descriptors-*Agricultural Education/*Vocational Agriculture Teachers/*Individualized Instruction/*Teaching Methods/Performance Criteria/Teaching Techniques/Effective Teaching/Secondary Grades

Identifiers-*Mastery Learning

Is mastery learning an effective strategy in the teaching of vocational agriculture? Instructional Management Problems, the individualized instruction approach, and performanced based curriculum are topics investigated in answering this question. (MW)

EJ102140 CE501438

DISTRIBUTED VS CONCENTRATED KNOWLEDGE OF RESULTS IN AN INDIVIDUALIZED INSTRUCTIONAL SYSTEM

Frantz, Nevin R., Jr. Journal of Industrial Teacher Education; 11; 4; 66-72 Sum 74

Descriptors-*Individualized Instruction/*Trade and Industrial Education/*Instructional Systems/*Feedback/Knowledge Level

The study indicated neither manner of providing knowledge of results was effective in learning to use and read a micrometer. (AG)

EJ100617 CE501368

CURRICULUM ORGANIZATION AND ARTICULATION IN VOCATIONAL EDUCATION

Nelson, Curtis L.; Ingvalson, Ker Agricultural Education Magazine; 47; 3; 57-8 Sep 74

Descriptors-*Vocational Education/*Articulation(Program)/*Individualized Instruction/*Curriculum Development/*Task Performance/Student Evaluation/Post-Secondary Education/Pretesting/Agricultural Occupations

Identifiers-Learning Packages

EJ098870 CE501151

THIS WE BELIEVE ABOUT IMPLEMENTING INDIVIDUALIZATION OF INSTRUCTION IN BUSINESS EDUCATION

Business Education Forum; 28; 8; 18-9 May 74

Descriptors-*Business Education/*Individualized Instruction/Policy Formation/Administrator Role/Teacher Role/Parent Role/Students/Teacher Educators

Identifiers-Business and Economic Education Policies Commission

A statement by the Policies Commission for Business and Economic Education postulates the validity of individualized instruction and states how its implementation depends upon school administrators and supervisors, teachers, teacher educators, students and parents. (AG)

EJ097558 CE501193

JOB INSTRUCTION SHEETS: AN APPROACH TO INDIVIDUALIZING THE ACCOUNTING CLASS

Caputo, Carmela C. Business Education World; 54; 5; 5-7 May-Jun 74

Descriptors-*Business Education/*Accounting/*Individualized Instruction/

*Instructional Materials/*Behavioral Objectives/Teaching Methods/Bookkeeping/High School Curriculum

The author describes a methodology which will help an accounting teacher individualize an introductory course; instruction sheets provide a lesson-plan format for the beginning teacher. Students proceed at their own rates, developing traits of independence while being actively involved in learning. (A sample job instruction sheet is included.) (AJ)

EJ094273 CE500823

LEARNING TIME IS ANY TIME AT MT. SAN JACINTO

Johnson, Milo P.; Schatz, Anne American Vocational Journal; 49; 4; 52, 54, 56 Apr 74

Descriptors-*Vocational Education/*Individualized Instruction/*Community Colleges/*Pilot Projects/*Educational Needs/Diagnostic Teaching/Instructional Systems/Open Enrollment/Student Participation

Eight years of developmental work at Mt. San Jacinto College have demonstrated that individualized instruction for vocational education is possible, practical, cost effective, and necessary today. Currently in use at Mt. San Jacinto are individualized instruction, open enrollment, continuous progression, prescriptive education, mini courses, and a revised grading system. (DS)

EJ094268 CE500818

A MODULAR APPROACH TO VOCATIONAL CURRICULUM. BLUEPRINT FOR INDIVIDUALIZED INSTRUCTION

Dupuis, Victor L.; Bell, Paul E. American Vocational Journal; 49; 4; 34-6 Apr 74

Descriptors-*Vocational Education/*Curriculum Development/*Computer Assisted Instruction/*Individualized Instruction/*Schedule Modules/Curriculum Design/Curriculum Planning/Units of Study (Subject Fields)

A modular approach to vocational curriculum development is in operation at Admiral Perry Vocational-Technical School in Ebensburg, Pennsylvania. Computer terminals located in each classroom direct students in individualized instruction. Several examples are cited of the implementation of the modular approach to curriculum development in vocational education. (DS)

EJ094261 CE500811

INDIVIDUALIZING INSTRUCTION IN BUSINESS EDUCATION

Calhoun, Calfrey C. Journal of Business Education; 49; 6; 252-4 Mar 74

Descriptors-*Individualized Instruction/*Business Education/*Individualized Program/*Teaching Methods

Three levels of individualization are identified: self-paced, different routes, and independent learning. Individualization requires answers to these questions: What is to be learned? Has the student learned it? What methods and materials should be used? Alternatives are presented to alleviate potential problems. Prepared "packages" of individualized instructional materials are mentioned. (SC)

EJ094255 CE500805

INDIVIDUALIZED PROGRESSION IN BUSINESS MATHEMATICS

Swindle, Robert E. Journal of Business Education; 49; 6; 239-40 Mar 74

Descriptors-*Business Education/*Individualized Instruction/*Mathematics Instruction

Identifiers-*Business Mathematics

The problem of diverse competencies within classes is addressed. The process of "individualizing" such courses is explained, and the findings of a related experiment are presented. (Author)

EJ092321 CE500565

MEETING STUDENT NEEDS: INDIVIDUAL PROGRESS IN SHORTHAND

Perry, Devern Business Education World; 54; 4; 5-7 Mar/Apr 74

Descriptors-*Business Education/*Business Education Facilities/*Stenography/*Individualized Instruction/*Audiovisual Aids/Grading/Course Organization/Pilot Projects/Program Evaluation

Shorthand courses at Brigham Young University have been organized to allow individual student progress using audio equipment and cassette tapes. Grading standards have been set up according to competency levels with immediate advancement available upon completion of each competency level. An evaluation of the program is included in the report. (DS)

EJ089104 CE500300

THE MODULAR TRAINING TECHNIQUE

Davy, W. F. Canadian Vocational Journal; 9; 3; 27-9, 45 F 73

Descriptors-*Industrial Training/*Training Techniques/*Schedule Modules/*Pilot Projects

The modular approach to training is a technique applicable to traditional forms of long-range training and the newer short-term training-in-industry. (DS)

EJ087933 EM503691

MONITORING INDIVIDUALIZED STUDENT PROGRESS IN VOCATIONAL EDUCATION PROGRAMS

Pucel, David J.; Copa, George H. Educational Technology; 13; 10; 54-57 Oct 73

Descriptors-Educational Programs/Evaluation Methods/Individualized Instruction/*Individualized Programs/*Models/*Student Records/Systems Approach/*Vocational Education

A description of a system for monitoring individualized student progress in vocational education programs for the purpose of reporting progress of individual students and the effectiveness and efficiency of the vocational education programs. (Author)

EJ087351 CE500191

CURRICULUM PACKAGING IN CAREER EDUCATION

Hargis, James W. Career Education Digest; 8-12 Nov 73

Descriptors-*Instructional Materials/*Career Education/*Individualized Instruction/Educational Programs/Instructional Aids/Units of Study (Subject Fields)

Objectives of instructional packages for career education are described, including diagnostic and prescriptive instruments. The difference between instructional packages and individualized instruction is clarified. (MS)

EJ085609 CE500105

INDIVIDUALIZATION IN SHORTHAND

Foust, Patsy Journal of Business Education; 49; 1; 19-20 Oct 73

Descriptors-*Stenography/*Business Education/*Teaching Techniques/*Individualized Programs

The method of teaching English rules in intermediate shorthand through the use of self-instructional or learning packages has proved to be successful at Mountain View College. Both instructors and students benefited from the individualized instruction method. (KP)

EJ083666 VT505141

INDIVIDUALIZED INSTRUCTION IN BUSINESS COMMUNICATIONS

Swindle, Robert E. Journal of Business Education; 48; 8; 335-336 May 73

Descriptors-*Individualized Instruction/*Business Correspondence/*Business Education/*Writing Skills/Teaching Procedures/Writing Exercises

EJ083665 VT505150

AN INDIVIDUALIZED APPROACH TO TYPEWRITING CURRICULUM

McLean, Gary M. Journal of Business Education; 48; 8; 333-334 May 73

Descriptors-*Business Education/*Typewriting/*Individualized Curriculum/*Curriculum Design/Models/Flow Charts/Individualized Instruction

EJ083368 SE509293

TECHNOLOGY EDUCATION COMMENTS - STUDENT RESPONSIBILITY FOR LEARNING

Defore, Jesse J. Engineering Education; 63; 6; 391 Mar 73

Descriptors-*Engineering Education/*Individualized Instruction/*Teaching Procedures/*Teaching Techniques/*Technical Education/Individual Study/Instruction/Self Help Programs/Student Projects/Student Role

Suggests the use of individually paced instruction, projects, and directed individual study as teaching methods to encourage students' responsibility for learning. (DC)

EJ081543 VT505013

INDIVIDUALIZING INSTRUCTION: WHEN AND HOW

Wagoner, George A. Business Education Forum; 27; 8; 27-28 May 73
Descriptors-*Individualized Instruction/*Business Education/*Literature Reviews/Course Objectives/Ability Grouping/Business Education Teachers/Teaching Methods
Review of the literature. (MU)

EJ080191 VT504857
KEEPING THE PROGRAM INDIVIDUALIZED
Walsh, Lawrence A. American Vocational Journal; 48; 4; 46-47 Apr 73
Descriptors-*Behavioral Objectives/*Distributive Education/*Individualized Programs/*Student Centered Curriculum/Cooperative Education/Project Training Methods

EJ077162 VT504663
HOW TO DEVELOP INDIVIDUALIZED INSTRUCTION PACKAGES
Teal, Dean A. Industrial Education; 62; 2; 34-35 Feb 73
Descriptors-*Activity Units/Behavioral Objectives/*Individualized Instruction/*Teacher Developed Materials/*Vocational Education
Identifiers-Learning Activity Packages/*Vo Paks

EJ076545 VT504733
WE INCREASED INSTRUCTIONAL EFFICIENCY WITH SELF-INSTRUCTION
Ronzheimer, Ken Technical Education; 129-132 Mar 73
Descriptors-*Individualized Instruction/*Individualized Programs/*Instructional Aids/*Instructional Improvement/*Technical Education
Technical Education is a supplement to Industrial Education. (MU)

EJ076066 VT504685
HELPING STUDENTS EXPLORE INDIVIDUAL JOB POSSIBILITIES
Dieffenderfer, Ruth I. Forecast for Home Economics: Teacher Edition of CO-ED; 18; 8; F-28, F-53-F-54 Apr 73
Descriptors-*Activity Units/*Career Education/*Occupational Guidance/*Self Evaluation
Identifiers-*Career Exploration/Self Awareness

EJ074950 VT504607
INDIVIDUALIZED LEARNING GUIDES IN FIRST-YEAR ACCOUNTING
O'Connell, Helen M. Business Education World; 53; 4; 12-13 Mar-Apr 73
Descriptors-*Accounting/*Business Education/*Individualized Instruction/*Study Guides/*Teaching Techniques

EJ073362 VT504538
INDIVIDUALIZATION IN TYPEWRITING
Bartholome, Lloyd W. Journal of Business Education; 48; 4; 160-161 Jan 73

Descriptors-*Behavioral Objectives/*Business Education/*Individualized Instruction/*Individualized Programs/Instructional Systems/Teaching Methods/*Typewriting

EJ073069 VT504536
ORGANIZING THE MULTIMEDIA FACILITY FOR INDIVIDUALIZED INSTRUCTION
Schatz, Anne E.; Sharp, June Journal of Business Education; 48; 4; 155-157 Jan 73
Descriptors-*Business Education/*Classroom Arrangement/Classroom Design/Educational Facilities/Facility Improvement/*Individualized Instruction/Instructional Materials/*Instructional Materials Centers/Instructional Media
Identifiers-*Multimedia Facility

EJ069438 VT504502
SELF-PACED INDIVIDUALIZED INSTRUCTION IN SECRETARIAL SCIENCE
Davis, Mary Alice; Corbett, Sara Balance Sheet; 54; 1; 159-160, 181 Dec 72/Jan 73
Descriptors-*Business Education/*Individualized Instruction/Instruction/Instructional Innovation/Instructional Technology/Office Occupations Education/*Secretaries/Student Centered Curriculum
Identifiers-Secretarial Science/*Self Paced Instruction

EJ059498 VT503712
FREE SCHEDULING: A TECHNIQUE FOR INCREASING ACCESS TO BUSINESS EDUCATION
Multer, Elinor Journal of Business Education; 47; 8; 331-332 May 72
Descriptors-*Business Education/*Flexible Scheduling/*Learning Laboratories/Pilot Projects/*Programed Units/Working Parents/Working Women
Identifiers-*Free Scheduling
Students can do their work on schedules suited to their individual needs. (Author)

EJ057760 VT503648
INDIVIDUAL INSTRUCTION--THE VOCATIONAL TEACHER'S NEW ROLE
Bjorkguist, David C. Agricultural Education Magazine; 44; 12; 295 Jun 72
Descriptors-Behavioral Objectives/*Individualized Instruction/Individualized Programs/Instructional Materials/*Instructional Technology/*Teacher Role/Teaching Methods/*Vocational Education
Stresses that the teacher is the most important instructional component in effective individualized instruction. (SB)

EJ057756 VT503643
INDIVIDUALIZED VIDEO SHORTHAND INSTRUCTION
Brenholt, JoAnne M.; Houghton, Edward L. Balance Sheet; 53; 8; 342-343 May 72

Descriptors-*Business Education/*Educational Philosophy/*Individualized Instruction/*Stenography/Viedo Tape Recordings

Presents a statement of educational philosophy upon which an individualized video program for shorthand can be based. (JS)

EJ057244 VT503671

MODULAR DESIGN: ANOTHER METHOD OF CURRICULUM DEVELOPMENT

Wallace, Bertran F. American Vocational Journal; 47; 5; 42-44 May 72

Descriptors-*Curriculum Development/*Guidelines/*Schedule Modules/*Vocational Education

Provides ten steps to follow in preparing modules for any vocational subject. (SB)

EJ054780 VT503478

INDIVIDUAL PROGRESSION IN GENERAL BUSINESS

Van Hook, Barry L. Business Education Forum; 26; 6; 56-58 Mar 72

Descriptors-*Business Education/Curriculum Evaluation/*Individualized Instruction/*Program Development/*Student Needs/Teaching Methods

A high school curriculum that deals effectively with the individual differences of students is evaluated. (MU)

EJ050653 VT503237

THE UNIT CONCEPT FOR THE EMERGING OFFICE

Gust, Dale D. Business Education Forum; 26; 4; 3-7 Jan 72

Descriptors-*Behavioral Objectives/*Business Education/*Office Occupations Education/*Student Needs/*Unit Plan

Identifiers-New Office and Business Education Learning Systems/NOBELS

The final article in a series of three designed to provide business educators with information on the emergent office. (JS)

EJ049396 VT503118

FIVE PATTERNS OF INDIVIDUALIZED INSTRUCTION

Claxton, James W. Business Education World; 51; 5; 16-17 May-June 71

Descriptors-*Behavioral Objectives/*Business Education/Cooperative Education/*Curriculum Development/*Individualized Instruction/*Program Descriptions/Student Needs

Described in this article are curriculum patterns for secretarial practice, clerical practice, business practice, intensified clerical practice, and on-the-job training. (JS)

EJ049388 VT503080

WORK UNITS FOR INDEPENDENT STUDY: TYPEWRITING 1

Hoyle, Thelma Caram Business Education World; 51; 4; 3-4 Mar-Apr 71

Descriptors-*Business Education/*Independent Study/*Individualized Instruction/*Program Descriptions/Program Evaluation/*Typewriting

EJ049082 VT503048

STRUCTURED INDIVIDUALIZED SHORTHAND LEARNING

Shimin, Eleanor Journal of Business Education; 47; 3; 105-106 Dec 71

Descriptors-*Behavioral Objectives/*Business Education/*Individualized Instruction/*Stenography/*Teaching Methods

Identifiers-Shorthand

When teachers understand how to teach differently, students will learn to write and transcribe shorthand in much less time than is thought possible. (Author)

EJ049077 VT503005

PREPLANNING FOR INDIVIDUALIZED INSTRUCTION

Patton, William E.; et al. Business Education Forum; 26; 3; 14-15 Dec 71

Descriptors-*Accounting/Behavioral Objectives/*Business Education/Course Content/Curriculum Development/*Guidelines/*Individualized Instruction/*Teaching Techniques

Through the types and steps of individualized instruction described in this article, it is hoped that bookkeeping and accounting teachers will be able to implement this method to a greater extent than in the past. (Author/JS)

EJ048789 VT503078

ANTHOLOGY ON INDIVIDUALIZED INSTRUCTION: REGIONAL LABS SPEARHEAD INDIVIDUALIZED INSTRUCTION

Perkins, Edward A., Jr. Business Education World; 51; 4; 2-3 Mar-Apr 71

Descriptors-*Business Education/Curriculum Development/*Educational Facilities/Educational Innovation/*Individualized Instruction/Instructional Improvement/*Program Improvement/*Regional Laboratories

The hope for individualizing the learning process in all courses in thousands of schools seems inextricably linked to the regional lab concept of broad scale systematic research, development, demonstration, and dissemination. (Author)

EJ048738 VT503008

EVALUATION IN INDIVIDUALIZED INSTRUCTION

Clayton, Dean; Moles, Louis Business Education Forum; 26; 3; 20-23 Dec 71

Descriptors-*Accounting/*Business Education/*Individualized Instruction/*Student Evaluation

Evaluation for individualized instruction in accounting assists the teacher in determining whether the student is meeting the objectives of the accounting course. Evaluation further serves as a process through which the teacher and student can make decisions concerning the student's rate of progress in attaining the objectives of the course. (Author)

EJ039865 VT502524
INDIVIDUALIZING EDUCATIONAL PROGRAMS
Bishop, Lloyd K. Business Education Forum; 25; 8; 13-14 May 71
Descriptors-*Business Education/*Curriculum Development/Educational Facilities/Educational Technology/*Individualized Programs/*Nongraded System/*Relevance (Education)/School Organization

EJ039563 VT502527
INDIVIDUALIZATION OF INSTRUCTION
West, Leonard J. Business Education Forum; 25; 8; 19-21 May 71
Descriptors-*Business Education/Individual Differences/*Individualized Instruction/*Student Needs

EJ038818 VT502529
MODULIZING DISTRIBUTIVE EDUCATION
Forr, William A.; Yerkes, Lester M. Business Education Forum; 25; 8; 22-23 May 71
Descriptors-Business Education/*Distributive Education/*Educational Administration/*Experimental Programs/*Program Evaluation/*Schedule Modules/Surveys

EJ038817 VT502528
MODULAR SCHEDULE AT A TWO-YEAR HIGH SCHOOL
Blume, Donald Business Education Forum; 25; 8; 21-22 May 71
Descriptors-*Business Education/*Educational Administration/*Flexible Scheduling/*Program Evaluation/*Schedule Modules/Surveys

EJ038816 VT502526
FLEXIBLE MODULAR SCHEDULING BY COMPUTER
McIsaac, Donald N., Jr. Business Education Forum; 25; 8; 17-19 May 71
Descriptors-*Business Education/*Computers/*Educational Administration/*Flexible Scheduling/*Schedule Modules

EJ038145 VT502392
INDIVIDUALIZED INSTRUCTION IN TYPEWRITING AND SHORTHAND
Schatz, Anne Journal of Business Education; 46; 7; 275-276 Apr 71
Descriptors-Behavioral Objectives/*Business Education/*Individualized Instruction/*Program Development/*Stenography/Teaching Techniques/*Typewriting
The instructional system is designed so that each student may be treated as an individual. The role of the instructor must also be changed to accomplish this goal. (Author)

EJ038111 EM501907
INDIVIDUALIZED INSTRUCTIONAL SYSTEMS FOR VOCATIONAL EDUCATION
Ullery, J. William Educational Technology; 11; 3; 22-25 Mar 71
Descriptors-*Educational Technology/*Individualized Instruction/Projects/*Systems Approach/*Vocational Education
The director of Project ABLE, a research program which intended to base development "in occupational education upon a unique combination of the most effective features of modern educational technology," gives a brief history and description of the project and states where to obtain further information. (Author/AA)

EJ035872 VT502265
INDIVIDUALIZE YOUR ROTATION PLAN
Copeland, Amanda Balance Sheet; 52; 6; 247-249 Mar 71
Descriptors-*Business Education/*Individualized Instruction/*Office Machines/*Rotation Plans/Student Needs/*Teaching Techniques

EJ035239 VT502318
INDIVIDUAL INSTRUCTION IN BEGINNING TYPEWRITING
Lambrecht, Judith J.; Gardiner, Marge N. Journal of Business Education; 46; 6; 243-245 Mar 71
Descriptors-*Business Education/*Comparative Testing/*Individualized Instruction/Program Descriptions/Teacher Role/*Teaching Methods/*Typewriting
The importance of the teacher to the success of any individualized teaching method cannot be overemphasized. (Editor)

EJ028472 AC500887
KOOSIS ON INDIVIDUALIZED INSTRUCTION
Training in Business and Industry; 7; 10; 27-29, 54 Oct 70
Descriptors-*Audiovisual Aids/*Individualized Instruction/*Industrial Training/*Industry/*Organization Size (Groups)
Big companies are big on individualized instruction, not because it is the technologically superior way of imparting skills and concepts but because it's a matter of necessity. Too much has to be taught, and there are too few instructors. (Author/EB)

EJ020359 VT501410
INDIVIDUALIZED INSTRUCTION IN THE AUTO SHOP
Hunter, Claud School Shop; 29; 9; 38-40 May 70
Descriptors-*Auto Mechanics (Occupation)/*Carrels/Classroom Techniques/*Individualized Instruction/*Post-Secondary Education/Program Descriptions/Skilled Occupations/Study Facilities/*Trade and Industrial Education
Describes an individualized instructional program designed to teach students to disassemble, test, and reassemble all electrical components made by the major automobile manufacturers. (GR)

EJ018578 VT501377

INDIVIDUALIZING INSTRUCTION FOR THE DISADVANTAGED

Warner, Marion B. Balance Sheet; 51; 8; 340-346, 376 Apr 70

Descriptors-*Business Education/*Disadvantaged Youth/Educational Resources/*Individualized Instruction/*Program Development/*Teaching Models

A suggested plan for teaching business education to the disadvantaged student. This article is a portion of a talk given by Mrs. Warner at the American Vocational Association meeting in Boston. (Editor)

CURRENT PROJECTS

VTP 1917

Title: Individualized Vocational Visual Media for Deaf Students.

Initiator: Doyce Tarkington
Institution: Arkansas School for the Deaf, Little Rock, Arkansas
Sponsor: Arkansas State Dept. of Labor, Little Rock
Duration: February 1, 1975 to December 31, 1976

Objectives: To develop a visual aid system to enhance the learning of deaf students. More specially the objectives are to: (1) Field test individualized sequential learning packages in at least nine vocational exploratory areas; (2) Increase the learning abilities of deaf students through single concept visuals media and hands-on activities; and (3) Enable deaf students to perform at a higher degree of confidence and independence.
Methodology: It is proposed that visual media be developed for the vocational exploratory course to enhance the learning of handicapped students at the School for the Deaf. Many of the students have multi-handicaps and progress at different rates; therefore, single concept learning packages would permit individualized instruction. The School for the Deaf provides numerous skill programs which are appropriate for deaf students. It would appear that individualized learning carrels would be a great asset to the overall vocational training endeavor at the school. Federal funds total $4,530.00.

VTP 1922

Title: Introduction to Individualized Business and Office Materials.

Initiator: Shirley Evans
Institution: State Fair Community College, Sedalia, Missouri
Sponsor: Missouri State Dept. of Education, Jefferson City
Duration: July 1, 1974 to July 31, 1974

Objectives: To provide information regarding office simulation procedures to business and office teachers in Missouri.
Methodology: The product to be developed will be a publication containing procedures, course descriptions, competencies to be developed, equipment and supplies needed, and other pertinent information for the creation of a model office. The above product will be printed and disseminated to vocational business and office teachers, and a number of institutions training vocational teachers. Federal funds total $470.00.

VTP 1965

Title:	Individualized Welding.
Principal Investigator:	Curriculum Dept., Oregon Department of Education
Recipient Institution:	Umpqua Community College
Start - End Dates:	June 23, 1975 to August 1, 1975
Annual Funding:	No data
Supporting Agency:	No data
Contract and/or Control No.:	No data

Summary of Project: This project will continue production of ILS materials for use in secondary schools and community colleges, based on the package development of summer '74 and product 15-20 complete slide-tape units in areas recommended by summer '74 writing team. These units will be correlated with packages now under evaluation from last year's project. Participants will include media production personnel as well as welding instructors. A/V materials (commercial) will be reviewed and suitable materials accepted for inclusion in the system. Areas under development are: arc, acytelene, mig and tig. NOTE: Please contact the Oregon Department of Education, Career Education Curriculum Coordinator for information--NOT the college where project is located.

VTP 1972

Title:	A Consortium for the Development of Individualized Instruction Performance-Based Curriculum.
Principal Investigator:	Jeff R. Spalsbury
Recipient Institution:	(1) Community College of Denver, Red Rocks Campus, Golden, Colorado; (2) Larimer County Voc-Tech Center, Fort Collins, Colorado; and (3) Warren Occupational-Technical Center, Golden, Colorado
Start - End Dates:	April 11, 1973 to --
Annual Funding:	No data
Sponsoring Agency:	No data
Contract and/or Control No.:	No data

Summary of Project: The Colorado Individualized Instruction Consortium Project designs and implements open entry-open exit, continuous progress, individualized instruction curriculum. This effort encompasses vocational education on both a secondary and post-secondary level. The Consortium Project creates a measurable objective based, multi-media Learning Activity Packet (LAP) format. Each LAP includes Purpose, Rationale, and Objective statements, plus multi-media reinforcement, Learning Activities, Job Sheets, and Pre-, Post- and Self-Evaluations. All original written material is tested and subsequently modified to meet rigid readability, grammatic, and syntactic criteria. The same criteria is used in the consideration of commerically developed material. Presently, the effort includes: Accounting, Appliance Repair, Auto Body, Auto Mechanics, Building Trades, Business & Office Occupations, Cosmetology, Drafting, Food Services, Graphic Arts, Machine Tool Trades, Radio & TV Repair, Urban Horticulture, and Welding.

Florida School Districts, Community/Junior Colleges and Universities. The task force will develop a position paper outlining the theoretical framework of the system and the relationship of its components. Upon completion of the paper, criteria which learning managers utilize in the individualization of learning experiences, teaching techniques and organization of learning experiences will be developed. Two concurrent activities will occur as criteria are being developed. First, a national panel of experts in curriculum theory and research will be selected to review and critique the theoretical framework, its processes and the criteria to be used in the learning manager process. The second concurrent activity will be the selection of teachers-learning managers who are experts in the individualization of instruction.

VTP 1736

Title: Performance Based Self-Paced, Individualized Instructional System.

Initiator: Donald E. Dunkle
Institution: Kent Vocational-Technical District, Woodside, Delaware
Sponsor: Delaware State Dept. of Public Instruction, Dover
Duration: July, 1974 to June, 1975

Objectives: (1) Each instructor will break down the units of his course into separate concepts and build his packages around this concept. The students will master these concepts at their own rate of speed and at the competency level indicated by the instructor in the objective to each package; (2) For each package an instructor develops, he will include a measurable performance objective, which is so clearly stated that there is no doubt on the part of the student as to what he must accomplish and to what level of performance he must accomplish it, demonstrated by the fact that each student works on his own, following the procedures given in the package, with assistance from the instructor when needed; and (3) Each instructor will build into the packages valid tests, relating directly back to the objective, on the material covered in that pacakge so that both student and instructor know immediately after the instructor evaluates a demonstration and/or written test that a student has or has not mastered the concept covered in the package at the competency level required.

Methodology: (1) Instructors will be required to develop an analytical job description; (2) Instructors will develop a profile sheet specifically detailed into individual concepts; (3) Each trade area is required to have a functioning advisory council which assists in development of a "needs assessment" which includes those skills required by prospective employers; (4) Instructors are encouraged to write and develop student-centered, self-pacing individualized packages for their own trade area; (5) Instructors will gear the language of the packages to the most basic vocabulary terms in order to have good communication; and (6) Instructors make sure that the behavioral objective for each package is measurable so student can evaluate himself. Federal funds total $25,151.00.

VTP 2057

Title: A Study of Student Characteristics Affecting His Performance in the Use of Individualized Learning Activity Packages.

Principal Investigator: William E. Daniels
Recipient Institution: Olympia School District
Start - End Dates: April, 1975 to December, 1975
Annual Funding: $2,250.00
Sponsoring Agency: Washington State Office of the Superintendent of Public Instruction, Olympia
Contract and/or Control No.: No data

Summary of Project: The objective of this project is to design a model for collecting and evaluating data concerning the characteristics of 75-100 vocational students (D.E.) using individualized learning activity packages in the state of Washington. During the spring semester of school year 1974-75, approximately 75 students enrolled in ten senior cooperative distributive education programs in the state of Washington will be selected for the study. At the end of the period of time given to complete the LAP's, the students will be separated into three categories: those who did not make it to the post-test or never passed the post-test; those who needed two or more attempts to pass the post-test; and those who completed the LAP's and passed the post-test on the first attempt. When the data has been collected, it will be treated statistically to ascertain whether an individual's performance is dependent on one or more of the factors of congruence of real-ideal self concept, grade point, or reading level.

VTP 1641

Title: Development of a Curriculum Delivery System for Individualizing Instruction in Vocational-Technical Education

Initiator: No data
Institution: Florida Dept. of Education, Tallahassee
Sponsor: U.S. Office of Education, Washington, D.C. Bureau of Occupational and Adult Education
Duration: June 15, 1974 to December 14, 1975

Objectives: The purpose of this project is to develop a curriculum delivery system for individualizing instruction in vocational-technical education that encompasses: (1) development of a theoretical framework for the curriculum delivery system, (2) identification of contributing components and processes of the system, (3) development of validated criteria to be used in the selection organization and presentation of learning experience, (4) field testing and refinement of criteria used in the teaching, learning process, and (5) promulgation of the curriculum delivery system, including components and processes.

Methodology: The plan calls for the establishment of a curriculum development task force composed of nine experts in the field of education, representing

VTP 1531

Title: Career Cluster Articulation Model Based on Behavioral Objectives.

Initiator: L. Joel Chastain
Institution: South Carolina State Dept. of Education, Office of Vocational Education
Sponsor: Appalachian Regional Council
Duration: From April 1, 1974 to March 31, 1975

Description of Project: This project developed lists of behavioral objectives for curriculums in Machine Shop and Air Conditioning & Refrigeration with teachers from vocational education, grades 11 and 12, and teachers from technical education, post-secondary education. During this project self-instruction materials will be revised, adapted and developed to satisfy the above objectives. The project objective is to improve and facilitate articulation between vocational and technical schools and to allow students year around entry into technical school curriculums.

VTP 1589

Title: A Study of the Transportability and Effectiveness of the UW-Stout CMIS in Individualized Instruction Systems Based Upon Learning Styles.

Initiator: Allan Hilgendorf
Institution: University of Wisconsin - Stout, Menomonie, Wisconsin
Sponsor: Wisconsin State Dept. of Public Instruction, Madison
Duration: July, 1974 to June, 1975

Objectives: (1) Review the computer programs and information obtained from two different trial applications of a Computer Managed Information System (CMIS) to formulate a more generalized flow chart of the basic model; (2) Complete a set of instructions along with appropriate system logic flow charts to aid instructors in adapting the CMIS model to their particular teaching environment; (3) Produce detailed logic flow charts with sample programs coding of those concepts which would be used in most applications of the CMIS model; (4) Implement the CMIS model in three VTAE schools and assist teachers and administrators with adapting the system to their particular educational and computing environments; (5) Identify all hardware and/or logic related problems involved with implementing the CMIS in those three environments and use that information to improve the system portability.
Methodology: (1) Prepare flow charts and descriptive information concerning the Computer Managed Information System used in two pilot applications at UW-Stout; (2) Identify and contact three VTAE schools who would agree to implement the system during the second semester; (3) Prepare descriptions of the hardware and curricula environments of the three proposed applications; (4) Write detailed instructions describing how to implement the basic learning styles concepts which would be included in all three applications; (5) Visit the three application sites (2 or 3 days at each site) and help the

instructors plan their system and begin producing learning materials; (6) Help write programs and provide consulting services for testing the three systems; (7) Provide consulting services for implementing each of the three systems (One day visit to each site); and (8) Begin analysis of data concerning problems of construction and implementing the CMIS. Incorporate necessary changes in the basic model. Federal funds total $5,000.00.

VTP 1605

Title: A Comprehensive Project to Develop Individualized Instructional Packages and Other Related Materials, for Georgia Coordinated Vocational Academic Education (CVAE) Students.

Initiator: H. R. Cheshire
Institution: Georgia Southern College, Statesboro, Georgia
Sponsor: Georgia State Dept. of Education, Atlanta
Duration: June 15, 1974 to July 31, 1975

Objectives: (1) To select from available sources those objectives that have direct application to CVAE; (2) To utilize available personnel to develop an appropriate individualized instructional system for CVAE; (3) To organize writing teams for the purpose of preparing instructional packages; (4) To validate all packages in terms of relevance to the stated objective, total content, and utility; and (5) To provide for the reproduction of all materials developed as a part of this project.
Methodology: An associate project director will be employed to coordinate project activities. Three laboratory technicians will be employed to: (1) Keep field teachers active with curriculum construction phases; (2) Write and develop learning activities; (3) Review and edit materials; (4) Produce audiovisual aids; and (5) Construct packages. This leadership team will recruit approximately 50 CVAE academic team teachers and/or coordinators committed to preparing the selected units of instruction. Consultants from CESA and the School of Education will be utilized as needed throughout Phase I. Dr. H. R. Cheshire will serve as Project Director and approximately 25% of his time (Georgia Southern College) will be assigned to this project. Federal funds total $153,564.00.

VTP 1344

Title: Curriculum and Instructional Materials Development for Individualized Instruction in Accounting, Shorthand and Typing.

Developer: Susan Hoatson--Shorthand; William Koide--Accounting; Trudy Pang--Typing
Institution: Kauai Community College
Sponsor: State of Hawaii and U.S. Office of Education, VEA 1968
Duration: From September 1973 to June 1975

Description of Project: Anticipated Products: (1) Modular units in Accounting, Shorthand, and Typing; (2) Each unit to include: (a) Written

text (sub-units from commercially published text), (b) Overhead transparencies accompanied by audio-tapes, (c) Audio-slides, and (d) Examinations for each unit. Methodology: (1) Examination of commercially produced programs, (2) Revision of commercially produced learning materials, (3) Produce own multi-media materials, and (4) Test materials and revise where necessary. Level: Post high school and pre-baccalaureate.

VTP 1345
Title: Redesigning and Developing Courses into Modular Learning Programs in Nursing.

Developer: Maxine Kim
Institution: Kauai Community College
Sponsor: State of Hawai . and Office of Education, VEA 1968
Duration: From September 1973 to June 1975

Description of Project: Anticipated Products: (1) Modular units in Nursing, (2) Each unit to include: (a) Written text (sub-units from commercially published text), (b) Overhead transparencies accompanied by audio-tapes, (c) Audio-slides, (d) Examinations for each unit. Methodology: (1) Examination of commercially produced programs, (2) Revision of commercially produced learning materials, (3) Produce own multi-media materials, (4) Text materials a d revise where necessary. Level: Post high school and pre-baccalaureate.

VTP 1346
Title: Redesigning and Developing Courses into Modular Learning Programs in Automotive Technology.

Developer: Bob Tsuda and Walter Yamaguchi
Institution: Kauai Community College
Sponsor: State of Hawaii and Office of Education, VEA 1968
Duration: From September 1971 to December 1974

Description of Project: Anticipated Products: (1) Modular units in Automotive Technology, (2) Each unit to include: (a) Written text (sub-units from commercially published text), (b) Overhead transparencies accompanied by audio-tapes), (c) Audio-slides, (d) Examinations for each unit. Methodology: (1) Examination of commercially produced programs, (2) Revisions of commercially produced learning materials, (3) Produce own multi-media materials, (4) Test materials and revise where necessary. Level: Post high school and pre-baccalaureate.

VTP 1351
Title: Design and Development of Individual Learning Units and Learning Support Systems through the Level and Phase Progression Plan Method: School of Welding Technology.

Developer: Daniel Aquino and Edward Horner
Institution: Hoomana School
Sponsor: Hoomana School
Duration: Continuous development

Description of Project: This project is to design and develop individual learning units for the inmate students of the Welding School in order that individual learning differences may be met, credit or advance entry into their occupational and/or educational objectives within society will be established and the student may progress and achieve (based on mastery) in less than the traditional semester or hourly requirements which will enable him to maximize his educational opportunities within his minimum sentence period. Priorities in Development: Phase I: (a) Overall structure design; (b) Levels and Phases; (c) Subphases; (d) Graduate support system. (Phase I completed.) Phase II: Design and Development of learning units, support and evaluation systems. (Phase II two-thirds completed.) Method of Input Development: Director, instructor and graduate division.

VTP 1467
Title: Preparation and Testing of Career Educational Modules for Teacher and Counselor Education.

Initiator: Norman C. Gysbers
Institution: University of Missouri-Columbia
Sponsor: Missouri State Department of Education, Jefferson City
Duration: September 1, 1974 through August 31, 1975

Objectives: (1) Continue to develop, field test, revise and complete career education modules for instruction and guidance programs at the elementary school level K-6 (developmental levels 1 and 2), (2) Identify and select career education concepts appropriate for instruction and guidance programs at the junior high school level 7-9 (developmental level 3), and (3) Develop, field test, revise and complete career education modules for instruction and guidance programs at the junior high school level 7-9 (developmental level 3). Methodology: Career education materials from around the country and other relevant literature will continue to be reviewed to identify possible career education concepts applicable to elementary and junior high school instruction and guidance. Additional modules will be developed at the elementary school level. New modules will be developed for grades 7-9 (developmental level 3) based on the concepts and goals used at the elementary level to establish continuity between the elementary and junior high modules. The completed modules will be sent to the Missouri State Department of Education. Federal funds total $33,246.00.

VTP 1485
Title: Agribusiness and Natural Resource Education in Michigan: Employment Demand, Competencies Required, and Recommended Delivery Systems.

Initiator: Eugene Trotter
Institution: Michigan State University, East Lansing
Sponsor: Michigan State Department of Education, Lansing
Duration: January 1, 1974 through December 31, 1974

Objectives: (1) To determine the demand for employers in terms of present and emerging jobs and in terms of the number of these jobs available; (2) To assess the competencies required for entrance and advancement in agricultural related jobs; (3) To assess the congruencies and discrepancies in existing vocational agribusiness and natural resources program.
Methodology: It is anticipated that the manpower demand will be determined through a process which involves analysis of (a) previously conducted studies and census data, (b) data from existing employers, self-employment and data about potential new employers, and (c) employment/career patterns within the agribusiness and natural resources fields. The methdology to be employed for this part of the study will be based on the model of curriculum development utilized by the Capital Area Career Center (Ingham Intermediate School District). Some competency studies related to this study have been completed or are now underway in Michigan and other states. These and others will be utilized when appropriate. Competencies required in agricultural related jobs will be determined according to the following categories or adaptations of categories: (a) job skills, (b) job knowledges, (c) job behaviors, (d) basic skills, and (e) equipment and tools required. The data collection instruments and the computer programs developed by the Capital Area Career Center will be utilized to the maximum extent feasible. Federal funds total $57,445.00.

VTP 1486
Title: Articulation of Occupational Education Programs Between Secondary Schools and Community Colleges/Technical Institutes.

Initiator: No data
Institution: James Sprunt Institute and Duplin County Public Schools, North Carolina
Sponsor: North Carolina State Department of Public Education, Raleigh
Duration: September 1, 1974 through February 29, 1976

Objectives: (1) To improve coordination of occupational education programs between the public schools and the technical institute; (2) To develop proficiency tests for selected common curricula and to place entering students according to their achievement level; and (3) To develop a comprehensive model plan for the articulation of high school occupational education programs with those of the community college/technical institute which can serve as a guide for articulation efforts throughout the state.
Methodology: (1) Comprehensive study and coordination of selected curricula, including preparation of new course outlines with clearly defined objectives and instructional methods. The Coordinator will work directly with instructors from the public schools and technical institute to accomplish this. (2) Use of consultants and study of other articulation projects and literature and

application to present project where appropriate. (3) Development of proficiency tests in focus programs to measure the achievement levels of entering students. (4) Implementation and evaluation of preliminary model articulation plans, including proficiency tests. The overall articulation program will be tested and revised as necessary during this period. (5) Publication of model articulation plan and dissemination to all appropriate educational agencies through direct mailings, workshops and educational publication. Federal funds total $37,200.00.

VTP 1487

Title: An Assessment Procedure to Determine the Effectiveness of Individualized Instruction Approaches in the Technical Institutes and Community Colleges of North Carolina.

Initiator: Mildred B. Johnson
Institution: University of North Carolina, Greensboro, School of Home Economics
Sponsor: North Carolina State Department of Public Education, Raleigh
Duration: July 1, 1974 through December 31, 1975

Objectives: (1) To identify aspects of the Occupational Education programs in the Technical Institutes and Community Colleges of North Carolina which have been individualized; (2) To determine the degree to which individualization has been implemented in each institution; (3) To develop a model, evaluate measures, and guidelines for assessing the effectiveness of instructional approaches used to meet the individual needs of students; and (4) To disseminate model, evaluate measures, and guidelines developed to assess the effectiveness of individualized approaches used in Occupational Education programs in Technical Institutes and Community Colleges.

Methodology: (1) Review of literature to determine: (a) Instructional approaches used to individualize instruction, (b) content to include in developing a profile describing individualized instruction approaches, (c) evaluate measures used to assess individualized instruction approaches; (2) Develop a profile form for determining individualization status of Occupational Education programs in the Technical Institutes and Community Colleges; (3) Identify Occupational Education instructional personnel in all of the Technical Institutes and Community Colleges of North Carolina who are implementing individualized instruction approaches; (4) Visit selected sites to pre-test the instrument developed in Step 2 and make necessary revisions; (5) Use profile form in a survey of all instructional personnel using individualized instruction approaches to determine: (a) aspects of the teaching-learning process that are individualized, (b) degree of individualization of these aspects; (6) Summarize data to determine individualization status within Occupational Education programs in all of the Technical Institutes and Community Colleges in North Carolina. Federal funds total $23,100.00.

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